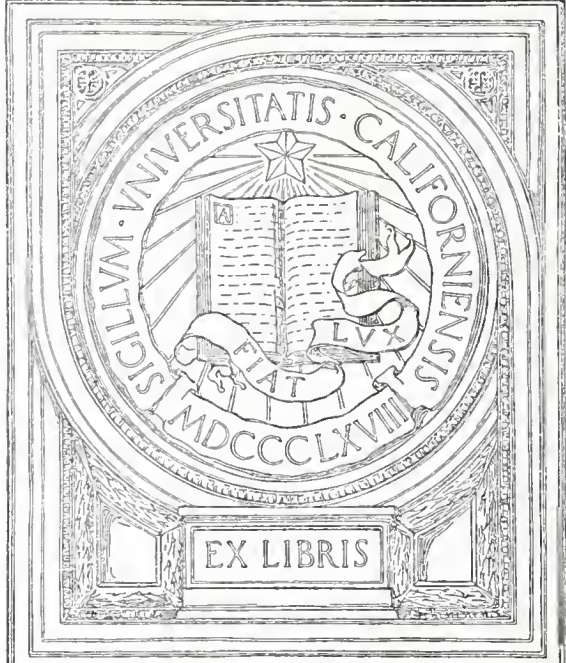


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The JOURNAL

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LITTLE ROCK, ARKANSAS, JUNE, 1941

No. 1

THE FUTURE OF ORGANIZED MEDICINE IN ARKANSAS *

H. T. SMITH, M. D.

McGehee

There has never been a time when the public has been so conscious of the current advances in science. People read of the modern miracles of medicine and are prepared to expect any pronouncement in its name. Since they are unable to discriminate, pseudo-science and cultism flourish to an unparalleled degree in this most enlightened scientific age.

The public is interested in better medical care. We are faced with an increasing demand for a more equable distribution of medical services. Our country has been almost the last to meet this issue. It must be faced wisely for the benefit of all people and in such a way that the quality of services shall not be impaired.

Another factor tending to divorce the public from reliance on doctors is the flood of proprietary medicines put up in attractive and palatable form. They are offered for sale over the counter and heralded from the air and by the printed word. Self-diagnosis and self-treatment convince people that they have no need for doctors, when for a small sum they can get temporary relief for imaginary acid indigestion, constipation, a headache, a pain or a threatening cold. The obliging and less scrupulous druggist can, and often does, profit from this large class of people who never see the doctor until such measures fail or until it is too late for the doctor to be of real service.

The future of the Arkansas Medical Society depends absolutely on the amount of cooperation and loyalty that each member renders to their county and to the state Society. It is a duty of every doctor in Arkansas to attend his

county, district and state medical Society. There is something I would like to call your attention to and that is postgraduate work. Our postgraduate programs held in Little Rock are not well enough attended and are not reaching a large proportion of the membership, a good many of whom need it very much. Lectures on obstetrics and pediatrics are doing a lot of good but are failing to reach a volume of doctors who should be reached.

It is my hope that in the future we will see additional buildings at the medical school furnishing sufficient clinic material for teaching purposes, not only to medical students, but for postgraduate work by the doctors of the state. It is my hope that some day we will have a postgraduate department in connection with the present medical school.

Workmen's Compensation: At the present time, as you know, we have a Workmen's Compensation Law. This, as you know, is a new law, but in my opinion, it is a very good law. We are going to find that in some instances insurance companies will be unreasonable in regard to selection of the doctor to attend these cases, but the free choice of physician is written into the law and must be complied with. So long as you make your report promptly and do your work efficiently you will have the protection of the Arkansas Medical Society.

Narcotic Law Violation: As you know there have been quite a few convictions for violations of the Narcotic Law by doctors in this state. In some instances these violations were probably unintentional or through carelessness. Each of you know what constitutes a violation of this law and it is my hope that no member of this Society will be convicted in the future.

National Youth Administration: The NYA, an organization with more than a thousand members in Arkansas, are attempting to inaugurate a health program and they plan to pay the doc-

* President's Address to the Sixty-sixth Annual Session, Arkansas Medical Society, Little Rock, April 14, 1941.

tor for this work (believe it or not). The Sebastian County Medical Society is conducting an experimental project in examining all NYA youth in their county. It is my hope that this will at least be one successful government project.

This paper would not be complete without paying tribute to the Woman's Auxiliary of this Society. They are doing a wonderful work and are increasing their membership each year. They are asking the state Society to make a small donation each year to the student loan fund. I am recommending that at least \$100 to be donated to this cause as it seems they are doing a good work in helping needy medical students over some hard places. We should lend all the encouragement and support to this work, as the future of medicine in Arkansas will depend a lot on how well we will work, not only in our state Society but in the Woman's Auxiliary.

RESOLUTION

Cash, Ark., May 16, 1941

The First Councilor District Medical Society, in session, was deeply saddened by the report of the death of one of our most beloved and loyal members, Dr. John C. Hughes, of Hoxie.

The writer has had the pleasure of knowing the deceased since 1896, being in medical school with him at that time, meeting him frequently in consultation, and at medical meetings often.

During the many years he followed his calling in the same community, he always conducted himself in accordance with the highest standards and ethics of his profession, and

Whereas, our member and life-long friend at all times was highly respected by his profession and by all who knew him,

Therefore, Be it resolved, by The First Councilor District Medical Society, that we, as a society, feel that we have lost one of our best members and wish to extend our sincerest sympathy to the family.

It can be truly said of Dr. Hughes that, "He was a friend to a friend and humanity."

Respectfully submitted,

The First Councilor District
Medical Society,

J. H. McCurry, Secy.

CONSERVATIVE RHINOLOGY *

PAUL L. MAHONEY, M. D.

Little Rock

The young physician of today has a much greater opportunity to master a specialty than the one who finished his training twenty years ago. Too often, however, after having finished his postgraduate training he has a profound theoretical knowledge of his specialty, but a tendency to treat his patients by radical rather than conservative measures. As a result of eighteen years of trial-and-error clinical research in a busy otorhinolaryngological practice, I have found that my enthusiasm for radical treatment decreases in direct ratio to my experience. The practice of our specialty in large cities and clinics differs from the practice in smaller cities and clinics where, literally speaking, we live in the midst of our clientele. In the smaller localities the physician has an opportunity to observe the results of his prescribed treatments over a period of years. He must get results or his sins will find him out and many of his radically treated patients will haunt him forever.

Since this paper presents the argument for conservative methods rather than a review of the literature or a resume of case histories no bibliography is included, although I acknowledge my debt to the many men whose research has advanced the knowledge of our field.

In some places too often the only history taken of a patient is that which is recorded by the nurse or the office secretary. A detailed account of the present illness, the past history, and the general physical status by the doctor himself not only frequently uncover important data, but allows him to study the patient as an individual, thus establishing rapport which is an important prelude to diagnosis.

Although the otolaryngologist is seldom consulted for acute coryza, he does have occasion to disseminate information about its proper treatment. With the air waves and newspapers full of commercial and pseudo-scientific advice, colored pictures, and reports of miraculously shortened colds, it is a somewhat one-sided battle. However, he can advise strongly against the drops, sprays, gargles, and other nostrums which he knows are not only useless but actually deleterious to his patients' well-being.

Prior to the last decade, the nose was considered an organ unworthy of physiological at-

* Presented as candidate's thesis to The American Laryngological, Rhinological and Otological Society, January 16, 1941.

tention. Until studies of the physiology of the nose convinced us that the nasal mucous membrane must be handled gently, it was indiscriminately douched, packed, and variously assaulted with potent drugs. It now has been demonstrated that ciliary action is an important factor in maintaining the upper respiratory tract in a condition of health, and that strong antiseptics not only fail to reach their objective, but decrease or inhibit entirely the prime factors of defense. Along these same lines oils as vehicles for drugs are not only ineffective but dangerous, for the recent literature contains an increasing number of case reports of lipoid pneumonias which may be directly traced to nose drops.

One per cent ephedrine in isotonic normal saline solution has been selected for use in the nose because of its effectiveness and because there is little danger of undesirable sequelae. The patient should be cautioned to use nose drops for a certain period of time only, for many times a prescription may be refilled and the drug be used several times daily for a period of months or even years. It is disturbing indeed to see the cases of argyrosis resulting from overzealous medication with the colloidal silver preparations. A perfectly normal nose may become pathological as a result of long continued use of even the most innocuous preparations.

An elaborate classification of sinusitis is of academic interest only. Practically, we must deal with acute catarrhal and purulent sinusitis and with the chronic stages of each.

The treatment of acute catarrhal sinusitis is identical with that instituted for coryza; namely, nasal shrinkage, with the usual general supportive measures.

The frequency and persistence of maxillary sinusitis make these sinuses an ever-ready focus for transmitting infection to other contiguous structures. While infection may involve one, several, or all of the sinuses, most frequently it is limited to the maxillary antra and ethmoidal labyrinth. It has been my observation that the original seat of the infection is in the maxillary antra, and that resolution in the ethmoidal sinuses would more readily occur were it not for the continuous drainage from the maxillary sinuses. Until the infection in the maxillary antra is conquered, whether it be an acute maxillo-ethmoidal sinusitis or an acute exacerbation of a chronic process, the infection in the ethmoidal

labyrinth will persist. I cannot recall ever having seen a roentgenogram showing evidence of ethmoiditis without some degree of infection in the antrum on the same side, although reverse findings are frequent. Any treatment directed to the maxillary antra that causes a subsidence of the infection will cause also a resolution of the infection in the ethmoidal labyrinth. With the exception of hyperplastic ethmoiditis with polyposis, it is my belief that chronic infection in the ethmoidal sinuses seldom would exist were it possible to prevent acute maxillary sinusitis from becoming chronic. In the event that a purulent sinusitis occurs, the pus must be evacuated, but it must be done judiciously, both in respect to time and to method.

Acute empyema of the antrum as described by the textbooks requires the minimum of diagnostic acumen. Actually, however, there will be patients who will not have localized pain over the maxillary region whose antra will transilluminate clearly and whose nose on first examination will not show pus. Shrinkage and careful inspection may reveal pus in the middle meatus in these patients. This particular type of patient, if questioned carefully, will usually relate that the pain originally started in the teeth or in the antral region then shifted to the frontal or vertex region. Transillumination will be clear for two reasons: namely, thin sinus linings indicating few or no previous infections, or pus of a low specific gravity.

Despite the fact that many physicians say that the presence of fever does not deter them in a diagnostic antral irrigation, I have seen unfortunate results in several instances which I could attribute to no other cause. Antral puncture is not, and never will be, an emergency procedure.

Although there is much in the current literature on the ease and desirability of utilizing the natural osteum maxillae for irrigation, I have been unable to accomplish this feat in a sufficient percentage of patients to compensate for the increased discomfort to the patient, loss of time, and to the dubious advantage it possesses over the classical puncture under the turbinate.

After irrigating a purulent maxillary sinus once every other day for four or five times, an intranasal window is indicated. The acute infection of the mucous membrane has subsided but the lining of the antrum has shown no disposition to return to normal, and to obviate chronic changes a large opening is made under the inferior turbinate.

inate. However, if the patient is from out of town and gives a definite history indicating the existence of infection in the sinus for a period of ten days or more, I feel justified in making a window immediately after establishing a diagnosis of purulent maxillary sinusitis.

Frontal sinusitis is not common in our climate. Measures to promote ventilation and drainage produce very satisfactory results, especially in the case of infrequent infections and in the absence of gross anatomical abnormalities. The middle turbinate is fractured and cotton pledgets saturated with ephedrine are placed in the region of the nasofrontal duct. It may become necessary to remove the vertical end of the middle turbinate. When these simple measures fail, as they do in a small percentage of cases, the intense pain persists but the patient does not exhibit acute systemic symptoms, an external opening is made, and a small rubber catheter is placed in the nasofrontal duct. This corresponds in every way with a small intranasal antral window. The pain is relieved, and unless the sinus lining is altered by chronic pathological changes, no further intervention is necessary. The catheter is removed from the intranasal end in several daily stages. This procedure is in no wise intended to supplant the various operations described for a chronic empyema of the frontal sinus, but it is advanced as a temporizing method in the hope that subsequent radical surgery will not be necessary.

Acute maxillo-ethmoiditis in children with external swelling and redness along with the marked systemic symptoms of high fever, chills, and toxicity, is a distressing clinical picture, and one that calls for self-control in curbing one's desire to incise and drain. Nasal shrinkage, gentle suction, and time invariably produce their good effects and external drainage rarely is necessary. Subsequently, the infection in the antra is dealt with by means of intranasal antral windows.

One of the most difficult problems to solve is the etiology and treatment of chronic catarrhal changes of the nasal mucous membrane. A history of frequent colds, headaches, backaches, alternating nasal blocking, dripping into back of throat, frequent sore throat, laryngitis, cough, and constipation with other gastro-intestinal disturbances is obtained. Usually the patient is the nervous type of individual, worries too much, seldom exercises, smokes too much, imbibes too freely, drinks too little water, does not rest enough, and requires drugs or enemas to produce intestinal elimination. While taking the

history we usually are informed that he has incurable sinus trouble and has taken treatments from one or more physicians for years, or has treated himself with almost every known drug prescribed or advertised.

On examination the nasal mucosa presents varying shades of red and probably maintains this same appearance throughout its continuations into the tracheobronchial tree and gastrointestinal tract. There is one-sided hypertrophy of the turbinates, bridges of mucoid or mucopurulent secretions, and posterior tip hypertrophies. X-ray evidence of changes in the mucosa of varying extent is noted in practically all of the sinuses. The septum may be deflected with marked compensatory hypertrophy of the turbinate opposite concavities of the septum. These anatomical changes alter the route of flow of the inspired and expired air in the nasal chambers and sinuses. In turn, the water secreted and the heat dispersed is altered. The result is over-drying in the exposed areas and over-moistening in the protected ones. It has been shown that mucosa undergoes changes that interfere with the propulsion and protection of the mucous blanket, which is perhaps the most important single factor in the prevention and eradication of nasal infection. This type of patient is given considerable time and, for the most part, treatment is conversational. A general physical examination is advised with particular attention being paid to the status of the endocrine system, the diet, and constipation. An effort is made to teach the patient the value of regular habits.

In conjunction with the above, septal deflections are corrected and mechanical treatments are instituted to prevent turbinal obstruction. This is accomplished by acid or electric cauterization of the turbinates. Turbinotomy is often resorted to. By this expression I mean resection of the lower end, at times, the lateral part of the inferior turbinate to prevent blocking of the lower part of the nasal chamber. We make determined effort to prevent the patient from becoming nose- and sinus-minded. He is not encouraged to report at frequent intervals for treatments; aside from directions as to the proper care of the body, in many instances nothing other than the withdrawal of all nasal treatments is recommended.

A properly performed submucous resection is one of the most gratifying operations we have to offer; a partial submucous resection, on the other hand, not only fails to produce the desired

results but greatly complicates the completion of the task at a later date and in other hands. The most common causes of failure, assuming that the operation is indicated and that the patient has attained his full facial growth, are: inadequate experience of the surgeon, desire for speed, incomplete removal of the perpendicular plate of the ethmoid, and attempting to operate with a general anesthetic. We, of course, realize that occasionally in complete obstruction of the side of the nose in children, it is necessary to remove a small portion of the anterior part of the quadrangular cartilage.

Perhaps the greatest stimulus to conservative rhinology, aside from our widened knowledge of nasal physiology, has been the recognition of the importance of allergy as related to our field. Conservative estimates will reveal that some thirty to forty per cent of all our patients have some allergic disorder. It is necessary therefore that the otolaryngologist and the allergist work in close collaboration. Many are now spared lifelong misery attendant on radical fronto-ethmoidal surgery by having a complete allergic work-up supplemented, perhaps, by a few simple rhinological procedures.

The patients with acute allergic vasomotor rhinitis, or the perennial type, are immediately referred for allergic study, for if intramucosal tests are made the results will be negative for some two or three months after any form of intervention in the nose. We must not now forget the patient, for however great his academic interest may be in the diagnosis, he primarily desires relief. It follows naturally that the nose must be returned to as nearly the anatomical normal as possible, and free breathing space provided. In addition to these facts, it is true that pathological conditions in the nose affect the course of the allergy unfavorably, so the inter-relationship of allergy and otolaryngology is doubly demonstrated.

If we have convinced ourselves that the purulent sinusitis has no allergic basis, what then must be our agenda? In the past five years we have performed twelve radical frontal operations: three for osteomyelitis following injury, five for fractures into the sinuses to evacuate the blood clots and inspect the posterior wall of the frontal, and four for chronic empyema which would not respond to conservative methods.

Chronic purulent maxillary sinusitis alone, uncomplicated by allergy, will almost invariably subside after a simple intranasal window. If the

patient has a chronic pansinusitis because of tremendously thickened membrane, a Caldwell-Luc operation will probably be necessary. After a Caldwell-Luc operation has been performed, many antra, if there be an allergic factor present, become so well organized that the cavity is virtually obliterated. Positive indications for the radical operation then resolve themselves into the following: foreign body in maxillary sinus, tumors of antrum, osteomyelitis of the superior maxilla, chronic maxillary sinusitis associated with a chronic pansinusitis, and finally, failure of an intranasal antral window to produce relief.

There is one class of patients whose symptoms are so uniform that they form a distinctive group. These complain of marked postnasal drip, dull headache across the bridge of the nose and behind the eyes, lassitude, and an inability to concentrate on any close work. This group of patients is closely associated with another previously discussed group—the introspective, nose-conscious individuals—but it is quite different in that thorough treatment we can offer them a great deal. The first inspection of the nose will be negative and the anterior sinuses clear but after shrinkage, some pus will be seen with the nasopharyngoscope high in the superior meatus and in the sphenoid-ethmoidal recess. Proetz displacements with one-half per cent ephedrine in normal saline solution every other day for five or six treatments will usually effect sufficient aeration and drainage for the symptoms to subside.

The internist and chest man have become cognizant of the fact that chronic sinusitis plays an important role in the etiology and aggravation of chest diseases. Bronchiectasis, certain lung abscesses, and often asthma may be entirely dependent on infection in the paranasal sinuses and may be materially benefited or cured by the eradication of these foci. This infection may be easily overlooked in adults, and even more frequently in children. Presented with a child who has persistent cough, productive or nonproductive, recurrent otitis media and frequent colds, the maxillary antra should be investigated as the most probable source of the infection.

The sphenoidal sinus is subject to acute and chronic inflammation, just as the other sinuses, but because of its relative isolation it is considered separately. In my experience surgery of the sphenoidal comes next in frequency to that of the maxillary sinuses.

From our eye department patients are referred for consultation. The examination has revealed a papillitis or patients have given the history of having frequently changed their glasses without relief from headaches. Their eyes tire easily, they experience difficulty in focusing after reading, and dull headaches appear. Others come directly to us stating that they have terrific headaches in the vertex radiating to the occiput and that sudden movements of the head, and especially jarring, greatly exaggerate the pain. The nasal chambers and nasopharynx are thoroughly inspected. Following this procedure, the tissues are shrunk and a cotton-tipped applicator saturated, but not dripping, with ten per cent cocaine is applied in the region of the sphenoidal ostium. The head is then lowered for several minutes and the region again inspected for the presence of pus. If none is noted the sphenoidal sinus is irrigated with warm saline solution and the return fluid is studied. I would estimate that ninety per cent of all sphenoids can be irrigated through the natural ostium provided there is no gross anatomical interference. When this is unsuccessful, X-ray with lipiodol by the Proetz displacement technique is done. If the symptoms do not subside, surgery is resorted to. The whole front face of the sphenoid is not taken down, for this procedure invites drying and constant dull headaches.

Patients in whom we are suspicious that a sphenopalatine ganglion syndrome exists are urged to come for examination at the time of headaches for the method of obtaining relief is a very important diagnostic point. After it had been determined that the pain disappeared on cocaineization, several patients with typical unilateral headaches were given permanent relief following the injection of the sphenopalatine ganglion with ninety-five per cent ethyl alcohol.

It is with misgiving and a sense of futility that I approach a patient with atrophic rhinitis. Few will consent to the radical Lautenschlager operation. The various proposed drugs; such as, theelin, etc., are of even less than dubious value so that the routine consists of a large amount of advice and a modicum of treatment. Nasal douches of saline and soda for cleanliness and advising the avoidance of those who promise cure is the unsatisfactory but present regime.

Having reported three clinical cases of choanal atresia and being impressed with the ease in which this congenital defect can be overlooked, it occurred to me always to become sus-

picious when the following symptoms are present: (1) Bilateral nasal discharge with no evidence of purulent secretions from the nasopharynx; (2) Loss of weight and inability to take nourishment; (3) Frequent otitis media and respiratory infections. The diagnosis may be made by the introduction of a small rubber catheter into each nares, or the instillation of dyes after the removal of secretions and the shrinkage of the nasal mucous membrane. Different colored dyes for each side will better determine potency of each.

The progress of otolaryngology depends upon the close inter-relationship existing among the anatomists, the physiologists, the pharmacologists, and the large teaching clinic; upon the desire of the practicing rhinologist to understand and study his patients individually and to profit by his mistakes and the mistakes of others; and above all, upon the idea that the great majority of disease conditions are self-limiting and that the physician's role is only to facilitate the recovery process by the most conservative measures possible.

RADIATION IN BREAST CANCER

"Radiographs of the chest and spine should always be taken before any surgical procedure is attempted. While operative removal is contraindicated in certain advanced lesions, this is by far the most valuable means we have for curing carcinoma of the breast. * * * The value of pre-operative X-ray therapy is still more or less indicated, but there is evidence that postoperative X-ray therapy has a definite place in the treatment of the disease. Lastly, sterilization of the individual has undoubtedly proven sufficiently beneficial to warrant its performance in certain cases."

Max W. Alberts,
Minnesota Medicine, Dec., 1940.

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TUBERCULOSIS ABSTRACTS

A Review for Physicians

DUST swept under the sofa disturbs no one—until it is discovered; nor does tuberculosis hidden from public view. It is well to be reminded that more than 5% of the people who die of tuberculosis annually in the United States die in mental hospitals. Scant attention has been paid to this sector of the problem for which reason an article on tuberculosis in mental hospitals commands the attention of health workers, hospital authorities and physicians. Abstracts of the article follow.

TUBERCULOSIS IN MENTAL HOSPITALS

The Peoria (Ill.) State Hospital, with an average daily census of 2,575 patients, has had a tuberculosis division since 1905. X-ray examination of the 56 patients assigned to it showed that 16% had no tuberculosis. Thus, of the resident patients in the hospital at the beginning of the survey, only 47 (1.87%) were known to have tuberculosis.

From the beginning of the survey it was obligatory to take a chest roentgenogram on all patients who were transferred to the infirmaries, irrespective of whether tuberculosis was suspected or not. In the course of the study there were surveyed 2,156 patients in residence, 766 newly-admitted patients and 477 employees. Tuberculin tests of these groups (all but about 4% were tested with tuberculin) showed positive reactions in 94.6% of resident patients, 80.6% of Receiving-Ward patients and 57.3% of the employees. Parenchymal lesions were revealed by X-ray in 11.2% of resident patients, 7.4% of Receiving-Ward patients and 1.6% of employees. The majority of the resident patients and less than one-half of the Receiving-Ward patients were over 50 years old. The great majority of employees were under 50 years of age.

The percentage of the tuberculous increased with the length of stay of the patients. Of the tuberculous employees, one-half developed the disease after five years of service.

About 10% of the tuberculous patients in the Receiving Wards were committed from tuberculosis sanatoria and about 14% were known to have tuberculosis at the time of admission. The remaining 5.7% were discovered in the course of the survey.

This study bears out what has been found in

other studies, namely, that when the physical examination alone is depended upon, tuberculosis is at times diagnosed when it does not exist and overlooked at others even in the terminal stage. One investigator found that 38% of the patients on the tuberculosis wards had no tuberculosis. In another hospital for mental diseases, two undiagnosed cases were found in 50 autopsies.

The different infection rates in the three groups can be attributed to the different age groups, and the high percentage of positive reactors among the resident patients chiefly to advanced age. It should be considered also that patients in this study come largely from the low-income group in which infection and morbidity rates are known to be high.

The significant difference in the percentage of tuberculosis among resident (11.2%) and Receiving-Ward (5.7%) patients indicates that many of the patients develop tuberculosis while they reside in the institution.

"The rationale of spending money on tuberculosis prevention among the psychotics, who already represent a tremendous burden on society, was seriously questioned by some authorities in the course of our study. The fact, however, that 6.9% of our tuberculous patients have already been discharged or paroled by January 1, 1940, shows that some of these patients have an opportunity to spread their disease in their own family and community after they return home. The possibility of the spread of the disease from these patients to the employees has also to be considered seriously. For these reasons the money spent on tuberculosis prevention must be considered as a prudent investment on the part of hospital authorities."

The treatment of the tuberculous psychotic differs in no way from that of the mentally normal, namely, rest. The chief aim of treatment is to convert the sputum and, therefore, collapse therapy is used even if the patient's mental condition seems to be entirely hopeless. Patients under shock therapy deserve special consideration—3.2% of such patients developed tuberculosis either during the course or after the treatment. Patients should be X-rayed immediately before undergoing shock therapy and frequently thereafter.

Should tuberculous psychotics be centralized in one institution? The disadvantage (from the state's standpoint) is that the transportation of patients is costly and that it entails a hardship when the family of a patient has to travel a long distance. Under decentralization, each hospital has to have on its staff at least one physician who is well trained in psychiatry as well as phthisiotherapy. The training of such physicians promises worth while contributions to the psychiatric as well as to the tuberculosis field.

The author's conclusions are as follows:

1. Tuberculosis is a problem of first order in every mental institution.

2. Patients suffering from tuberculosis are admitted to these institutions in a fairly large percentage without being so diagnosed. In addition to these, a relatively large percentage of patients develop tuberculosis while in residence, again without their disease being recognized.

3. Due to the contagious nature of tuberculosis, mental institutions should develop a definite and systematic tuberculosis control program, employing the tuberculin test and X-ray in diagnosis. These examinations should be conducted on all newly-admitted patients immediately after admission and on the resident patients at least once annually.

4. Collapse therapy should be fully utilized in the treatment of the tuberculous psychotic, irrespective of the patient's mental deterioration.

5. Patients selected for shock therapy should be X-rayed before commencing treatment and rereayed at frequent intervals during and after such treatment.

6. Employees coming in close contact with the patients should be X-rayed every three months and the tuberculin reactors among the other personnel at least once annually.

Tuberculosis in Mental Hospitals, M. Pollak, M. D., et al., *Amer. Rev. of Tuber.*, March, 1941.

PROCEEDINGS OF SOCIETIES

The Benton County Medical Society was addressed May 1st by Geo. M. Love, "Report of the Annual Session," and Clyde McNeil, "Medical Legislation."

M. W. Chastain, Secretary.

The Ouachita County Medical Society met in regular monthly session May 1st, at the Camden Hospital. After a delightful banquet the following program was rendered: "Obscure Signs and Symptoms in Urology," H. Fay H. Jones, Little Rock; and "Pitfalls in X-ray Diagnosis," D. A. Rhinehart, Little Rock.

R. B. Robins, Secretary.

The Pope-Yell County Medical Society met May 8th as dinner guests of Dr. and Mrs. W. E. Ballenger at Plainview. Robert Hood, Russellville, read a paper on "Pertussis."

Brooks Teeter, Secretary.

The Mississippi County Medical Society was addressed May 6th by W. A. Ruch, Memphis, "False Labor Versus True Labor," and J. L. McGehee, Memphis, "Acute Appendicitis in Pregnancy."

F. D. Smith, Secretary.

The May meeting of the Craighead-Poinsett County Medical Society was addressed by P. W. Lutterloh and H. H. McAdams.

The Independence County Medical Society has elected V. D. McAdams, Cord, to fill the unexpired term of the late I. M. Huskey, as Vice-president.

The Sebastian County Medical Society was addressed May 13th by Fred Hames, Pine Bluff, "Low Voltage Radiation Therapy in Skin and Other Superficial Lesions."

W. F. Adams, Secretary.

The Sevier County Medical Society was addressed at DeQueen May 13th by A. A. Blair, Fort Smith, "Heart Disease."



H. FAY H. JONES, M. D.
Little Rock
President, Arkansas Medical Society
1941-1942

THE JOURNAL

OF THE

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EDITORIALS

THE AMERICAN MEDICAL ASSOCIATION "GUILTY"

After a prolonged trial in Washington, the jury brought in a verdict of "guilty" April 4th in the case of the Federal Government against the American Medical Association and a number of individual physicians connected with organized medicine. By the verdict the American Medical Association stands convicted of conspiring against the anti-trust act. Strange as it may seem, the individual physicians were not found guilty—a rather confusing state of affairs, even to the legally trained, we suspect. It seems that a crime was committed but there is no criminal.

Medicine's right to control medical practice in the interests of the public now seems to be questioned. To organized medicine, and to no other body, is due the credit for the present high standards of medical education and practice. These standards were not legislated into existence but came into being solely because the medical profession sought constantly to improve the quality of medical service to the public.

There are mutterings that medicine must become a trade, that our code of ethics is obsolete and that our efforts to maintain ideals are conspiracies. This we emphatically dispute. We are certain, however, that now is truly the time for the profession to unite and stand fast in a fight for rights and ideals.

EDITORIAL COMMENT

ANNUAL REGISTRATION

In accordance with the provisions of an act of the 1941 Legislature, the State Medical Board of the Arkansas Medical Society has called for a registration payment of two dollars from all licentiates of that board residing in the state. Payment must be made by July 1st. Failure to make payment of the registration fee automatically suspends that physician from his right to practice medicine under the laws of the state. Members of the Society are urged to promptly remit the fee to Dr. D. L. Owens, Harrison, giving number of license, date of graduation and school from which graduated.

RANDOM THOUGHTS OF THE SECRETARY

May 6th. In a grandiose manner and without much apparent consideration of the fact that the capital of Latin culture is now in our South American republics, not Paris, we send one of our glamorous "movie stars" on a good-will mission. We'll predict his personal appearances in Latin America do not call forth the excitement of a premiere up this way.

May 8th. To Plainview carrying Amis who opines that we cannot find the way but that if we do, we will be entirely too late for the meeting; if not late, we cannot find the Ballengers'; but if we should, the meeting will have been postponed, all these pessimistic forebodings being confounded in the entirety. Seated at a table where Mrs. Ballenger has placed food in greatest abundance, we enjoy this material joy and the companionship and fellowship of the Pope-Yell county boys, greeting among others, Lee Montgomery, a consistent member, and the holder, we believe, of all mileage records for attendance at his county medical society meetings. Chased by Kent Grace over the forest mountain road, a feat successfully accomplished despite Amis's renewed pessimism, which Grace later informs us he shared. Stopping for a chat at Danville and thence on via Highway 10, never more beautiful than this night. Memo to Chas. Townsend, N. B. Daniel and Chas. Wallis: At Danville is Smith's Cafe, presided over by none other than that famed restaurateur, "Butthead" Smith, a well-known Ouachita Tiger some years ago.

May 13th. The Fred Hames and the Virgil Paynes come to town, Fred appearing on the county society program, and boosting the stock of roentgen irradiation in this locality, though we must endure a considerable heckling.

PERSONALS AND NEWS ITEMS

Geo. B. Fletcher, Hot Springs National Park, has been appointed to the Board of the State Hospital for Nervous Diseases.

A. M. Elton, Newport, has been appointed a trustee of Arkansas State Teachers' College.

Hoyt R. Allen, Little Rock, and R. B. Robins, Camden, have been elected directors of the Little Rock Executive Club.

D. L. Owens has been elected a director of the Harrison Lions Club.

R. B. Robins recently addressed the Camden Civitan Club on "Progress in Medicine."

Foster Jarrell has been appointed Garland county coroner.

David LeVine recently addressed the El Dorado Rotary Club on "X-rays."

Elizabeth Fletcher and John Stathakis, Little Rock, attended a 14-day neuropsychiatric seminar at Columbia, S. C., during April.

C. H. Finney, Fort Smith, has been ordered to active duty with the Army Medical Corps and assigned to Camp Snelling, Minnesota.

W. B. Grayson and G. D. Thompson, Little Rock, have been appointed to the Board of Cosmeticians.

Major Hugh C. Brooke, Camp Robinson, is attending the Medical Field Service School, Carlisle, Penn.

"Accurate Placement of Radon Seed by Suture Method," by Fred Hames, Pine Bluff, appeared in the May issue of The Southern Medical Journal.

Winners in the H. King Wade tournament held during the state meeting in Little Rock were: H. King Wade, Hot Springs National Park, low gross and low net; Henry G. Hollenberg, Little Rock, runner-up for low gross; O. C. Melson, Little Rock, runner-up for low net; C. E. Kitchens, DeQueen, low gross (handicap of 20 or over); and Alan A. Gilbert, high score. Dr. Wade disqualifying himself for the trophy, it was awarded H. G. Hollenberg.

Lawrence Zell, Little Rock, has accepted an appointment with the United States Public Health Service in Washington, D. C.

The following attended the American College of Physicians session in Boston during April: J. N. Compton, Fred W. Harris, and O. C. Melson, Little Rock; and Driver Rowland and Euclid M. Smith, Hot Springs National Park.

BORN—To Dr. and Mrs. W. V. Newman, Little Rock, a son, on April 27th.

R. M. Eubanks, Little Rock, has been appointed to the Board of the State Tuberculosis Sanatorium.

Chas. S. Holt, Fort Smith, was elected a trustee of the Mid-West Hospital Association at its recent meeting in Kansas City.

The following have been appointed to The State Medical Board of the Arkansas Medical Society: J. T. Matthews, Heber Springs; D. L. Owens, Harrison; J. B. Jameson, Camden; E. A. Callahan, Carlisle, and L. J. Kosminsky, Texarkana.

J. J. Monfort, Batesville, addressed a recent district meeting of Kiwanis Clubs in Little Rock.

E. H. White, Little Rock, has been appointed Chairman for Arkansas of the American Committee of Maternal Welfare.

L. F. Barrier, Little Rock, has been appointed to the Board of McRae Memorial Sanatorium.

Gean S. Atkinson has been elected president of the Manila Lions Club.

D. W. Goldstein, Fort Smith, has received a certificate of distinguished service from the American Society for the Control of Cancer for five years of service with the Women's Field Army.

R. H. Johnston, Clarksville, has reported for active duty with the Army Medical Corps and is stationed at La Garde Hospital, New Orleans.

W. W. Johnston, Helena, has been taking special work in pneumothorax at State Sanatorium.

N. R. Hosey has moved from Joiner to Helena.

J. M. Norton, formerly with the State Hospital at Haskell, has located at Arkadelphia.

C. H. Reagan, Marked Tree, has reported for active duty with the Medical Detachment, 206th C A (A-a), Arkansas National Guard, Fort Bliss, Texas.

N. T. Hollis has been appointed acting superintendent of the State Hospital for Nervous Diseases.

Thos. Douglas, Ozark, has recovered from an operation performed during April.

B. E. Barlow has been ordained a deacon in the Dermott Presbyterian Church.

J. N. Compton, Little Rock; Driver Rowland, Hot Springs National Park, and Fred W. Harris, Little Rock, have passed the examinations of the American Board of Internal Medicine.

W. C. Russwurm was honored at a birthday celebration in Helena May 1st. The party was held at the home of Dr. and Mrs. H. H. Rightor and was a county-wide affair.

Ralph E. Crigler recently addressed the Fort Smith Credit Women's Club.

Dr. and Mrs. Harvey Shipp, Little Rock, spent a May vacation in Florida.

E. R. Barrett has moved to new offices in Jonesboro.

G. R. Siegel, Clarksville, has been appointed Chairman of the Fourth Annual Johnson County Peach Festival.

OBITUARY

STEPHEN S. JONES, age 70, of Calico Rock died in a Batesville hospital May 7th of coronary disease. Born in 1871, Dr. Jones had practiced in Izard county for the past 22 years. Surviving relatives are his wife and two daughters.

SIMEON J. HESTERLY, aged 78, Nevada county's oldest practitioner, died at his home in Prescott May 2nd. Born in Magnolia September 19th, 1863, he attended the schools of that county and graduated from Memphis Hospital Medical College in 1896 and began practice in Prescott in 1897. Active in civic and business affairs, he had served on the City Council from 1912 to 1916, was vice-president of the Bank of Prescott, was part-owner of the Hesterly Drug Store, had been city and county health officer, a trustee of Ouachita College and was one of the oldest members of the First Baptist Church where he had served as deacon since 1912. He was a member of Prescott Lodge No. 80, F. & A. M. He was elected to honorary membership in the Nevada County Medical Society and in the Arkansas Medical Society in 1938. He served as a member of the State Medical Board of the Arkansas Medical Society and had been a vice-president of the Arkansas Medical Society. Surviving relatives are two daughters and three sons, one of whom, Dr. J. B. Hesterly, is in practice at Prescott.

PROCEEDINGS SIXTY-SIXTH ANNUAL SESSION ARKANSAS MEDICAL SOCIETY

HOTEL MARION, LITTLE ROCK, ARKANSAS

April 14th, 15th, 16th, 1941

FIRST SESSION, HOUSE OF DELEGATES

APRIL 14, 1941

The meeting was called to order at 9:00 a. m. by President H. T. Smith.

The Credentials Committee (S. J. Albright, J. B. Jameson, A. C. Kolb) reported that the credentials of the delegates present had been examined, found correct, and that a quorum was present.

The Secretary called the roll of delegates.

The following delegates and county society members seated as delegates by action of the House of Delegates were present:

ASHLEY—M. C. Crandall; BOONE—Ulys Jackson; CARROLL—D. K. McCurry; CHICOT—W. D. Easterling; CLAY—F. H. Jones; CLEBURNE—J. T. Matthews; CLEVELAND—W. G. Hancock; COLUMBIA—W. P. Cooksey; CRAIGHEAD-POINSETT—Ira Ellis; CRAWFORD—S. D. Kirkland; CRITTENDEN—B. M. Stevenson; CROSS—A. F. Barr; GARLAND—H. King Wade; HEMPSTEAD—A. C. Kolb; HOT SPRING—W. G. Hodges; INDEPENDENCE—C. A. Churchill; JACKSON—H. O. Walker; JEFFERSON—J. M. Lemons; JOHNSON—J. M. Kolb; LAWRENCE—J. C. Hughes; LITTLE RIVER—B. C. Routon; LONOKE—E. S. Whaley; MILLER—L. J. Kosminsky; MISSISSIPPI—Gean Atkinson; OUACHITA—R. C. Kennerly; PHILLIPS—J. Q. Blackwood; POLK—B. H. Hawkins; POPE-YELL—Robert Hood; PRAIRIE—J. C. Gilliam; PULASKI—Jos. F. Shuffield, E. H. White, Joe Sanderlin; SAINT FRANCIS—J. O. Rush; SEARCY—E. G. Fendley; SEBASTIAN—Chas. S. Holt, Fred H. Krock; SEVIER—C. A. Archer; UNION—H. J. Mayfield, A. D. Cathey; WASHINGTON—Ruth Ellis Lesh; WHITE—S. J. Albright; WOODRUFF—C. E. Dungan.

Other members of the House of Delegates present were: President H. T. Smith; Councilors F. D. Smith, L. T. Evans, J. O. Rush, S. W. Douglas, R. B. Robins, H. E. Murry, Euclid M. Smith, F. A. Corn, Jr., J. F. John and Clyde McNeil; Past-presidents Geo. B. Fletcher, O. J. T. Johnston, L. J. Kosminsky, J. M. Lemons, M. L. Norwood, D. A. Rhinehart, Frank Vinsonhaler, S. J. Wolferrmann and W. T. Wootton and Secretary Brooksher.

F. H. Jones, Piggott, introduced Geo. A. Schenewerk, Dallas, fraternal delegate from the State Medical Association of Texas, who extended greetings to the Society.

A. C. Kolb introduced A. A. Herold, Shreveport, fraternal delegate from the Louisiana State Medical Society, who extended greetings to the Society.

The President introduced F. W. Ewing, Muskogee, fraternal delegate and president-elect of the Oklahoma State Medical Association, who extended greetings to the Society.

By motion (Kosminsky-L. T. Evans) the minutes of the 65th annual session as published in the June, 1940, issue of The Journal of the Arkansas Medical Society were adopted as correct.

President Smith appointed the following Reference Committee: S. W. Douglas, M. E. McCaskill, and B. M. Stevenson.

E. E. Barlow took the chair.

President Smith delivered the President's Address to the House of Delegates.

OBSERVATIONS AND SUGGESTIONS *

H. T. SMITH, McGehee

In beginning allow me to again say that I deeply appreciate the honor of being your president and have attempted in my feeble way to discharge the duties of president as best I could.

First, I would like to discuss with you our part in the National Defense Program. It was my privilege to assist in setting up the Medical Draft Boards of our state and, except for a few instances, all men placed on these boards were members of good standing in their county medical societies. I do not approve of some of the instructions that have been issued the Draft Boards. For example, in the beginning it was understood that draftees with venereal diseases would be placed in class I-A and it was my information that these men would be drafted into service and treatment by the government. This order was changed and these men are now placed in class I-B, and are to be left for treatment by (whom?). This, in my opinion, is a great mistake for the reason that if certain of the colored population find that they can be exempted from military service by contracting

* President's Address to the House of Delegates, Sixty-sixth Annual Session, Arkansas Medical Society, Little Rock, April 14, 1941.

venereal diseases, there will be a lot of them deliberately contracting diseases.

Medical Legislation: As most of you know, we had quite a bit of disturbance about our basic science law, all of which leads me to the conclusion that we have followed the wrong course in the past as regards medical legislation. It is my opinion that the Legislative Committee appointed in this meeting should draft the medical legislation we expect to pass two years from now, and submit these suggestions to the House of Delegates next year for their approval or disapproval. By so doing we would have our medical legislation ready before elections, and have time to make our contacts with representatives and senators before they are elected. The act as finally passed validated the licenses that have been issued by the chiropractic board prior to January 15, 1940, of those who were resident practitioners in the state on that date and making them subject to the malpractice (Gant) act, thus preventing them from advertising untruthful and improbable statements.

House Bill No. 33: Approved by our council, this bill, which provided for improvements at the State Hospital, failed to pass by one vote. We feel that this bill should have passed as it was a needed improvement in our state set-up.

House Bill No. 448: Bill as finally passed permits the revocation of the license of a physician who has been convicted of a crime involving moral turpitude even though, by leniency of the court, the sentence may have been suspended, or the physician be placed on probation.

House Bill No. 587: The House of Delegates at its last session ordered the legislative committee to secure an annual registration law. The electics have had this law in effect since 1935, and say that it has been of great benefit to enabling them to keep up with their licentiates. The present medical practice act was passed in 1903, and many licentiates who were admitted to the practice prior to the date, are unknown to the secretary. This will enable the publication of an authentic list of all those who have a right to practice. It will also provide funds for the publication of such a list, and for investigating violations of medical practice act.

House Bill No. 602: Mr. Campbell, of Garland, passed an act in 1939, providing that on registration with the State Board of Health, by a retired army officer, that he should be permitted to practice. This bill repeals that act, but

provides that rights be granted under it shall not be disturbed.

House Bill No. 673: This bill levies a .10 mill tax on all the property in the state for the medical school fund. The sum of \$300,000 annually is now provided for the school and University Hospital from liquor and beer revenues, and the proceeds of this tax will supplement that fund. It is the first permanent source of revenue that the school has had.

House Bill No. 750: Provides that if any funds accumulate in the charities fund, beyond that appropriated to the State Hospital and the two sanatoria, or if they do not expend their full appropriations, that this saving will be used for a nurse's home and a psychiatric unit at the school. As the governor looks with favor on these additions to the schools, it is likely that funds will be derived from this bill.

Health Department: It is my opinion that some changes should be made in our Health Department. In the past we have had a very good understanding with our Health Department and have had few complaints about the way they have conducted their department, but it is my opinion that certain changes should be made.

I realize that a radical change at the present time may not be for the best, but when vacancies occur on the board I believe that the doctors from that Congressional District should be allowed to select three names to be presented to the governor for his consideration. It is my opinion that Governor Adkins would appreciate an expression from the doctors in each Congressional District before making these appointments.

As some of you know that it has been my opinion for some time that a reorganization of this department, creating a Commissioner of Health, to supervise the medical service and health service in all our state institutions. One reason for this change is that the Board of Health is the only group which has the authority to pass rules and regulations that are enforceable by law. The present state board was created by the Arkansas Medical Society and has cooperated with us through many years. An almost identical set up as I have just described has been instituted recently in the state of Louisiana with Dr. John H. Musser as head of the organization.

I would like to have an expression for the House of Delegates before the end of this meeting on this subject.

Medical Ethics: On this subject I would like to make the following statement. It is my opinion that every county medical society should have at least one program each year on medical ethics. Prior to 1847 we had no code of medical ethics in existence in the United States. A committee was appointed by the American Medical Association in 1847 to report a code of ethics which was done in 1848. Since that date very few changes have been made in the American code. The Ethics of Medicine became a living force when the founding of the Christian religion made each of us his brother's keeper and promulgated the Golden Rule. It is on the basis of the Golden Rule that our medical ethics is built, and the Golden Rule is the strong rock of foundation of today's medical ethics, for it can all be summed up into one sentence. "Do unto others as you would have them do unto you." In discussing medical ethics we iron out some of the difficulties that confront us and it is only ethical medicine that will stand the stress and strain of the present world.

Contract Practice: For a number of years we have discussed contract practice in our state Society and on different occasions have taken some action. Contract practice is not unethical if certain rules and regulations are complied with. The following rules and regulations have been adopted by the council of the state Society:

What Constitutes the Acceptable Contract to Render Medical Service?

A contract must be legal, equitable, and ethical.

The following fundamentals should be embodied in any contract to render medical service:

1. The compensation received must be based on the usual fee paid for the same quality of service in the same community.
2. The compensation must not be so low that the physician cannot render adequate medical service.
3. It should be required that the fee be paid promptly and without discount.
4. There should be no competitive bidding to secure contract.

5. There shall be no solicitation of patients, either directly or indirectly, by agent or advertising.

6. The free choice of a physician must not be denied those cared for in a community in which other qualified physicians are available.

7. The contract must not tend to lower the standard of medical practice and medical ethics.

8. The nature of contract practice must not tend to commercialize or socialize medical service.

It is my opinion that all contracts to render medical service should have the approval of the county medical society and if the contract extends beyond the limit of that county they should have the approval of the state medical Society. One copy of every contract should be filed with the county medical society and another copy with the council of the state Society. This in my opinion would avoid a lot of misunderstanding that now exists in the state medical Society.

Farm Security Administration: The FSA cooperative medical projects are horrible examples of what contract practice supervised by many lay groups will become. I see no future in the Farm Security cooperative medical projects under the present system. First, because they are not medically supervised. Second, because not enough money is set up to insure adequate medical service. I realize that this group of people of which we will continue to have large numbers, are in the low-income group and are entitled to some consideration for this reason. It is my opinion that the patient's ability to pay should always be considered, but the ability to pay should be decided by the doctor rendering medical service and not by the foreman on the plantation. I would recommend a change in the Constitution and By-Laws to enable the Society to establish a benevolent fund, for indigent physicians and their wives.

Board of Trustees: It is my opinion that we should have a change in Constitution creating a board of trustees.

In closing allow me again to thank you for your splendid cooperation during the past year.

President Smith returned to the chair and the committees of the Society then reported in order, each report being referred to the Reference Committee.

LEGISLATIVE COMMITTEE

JOS. T. SHUFFIELD, Chairman

Your Legislative Committee has just finished probably the most difficult task that this Committee has ever had, even more than in 1929 when our Basic Science Law was first passed. Our labors were greater because our Society had not had the Basic Science Law enforced and two of our Attorney Generals had rendered favorable rulings to the chiropractors and against the Basic Science Law. Had it not been for the following five things, your Committee would have failed to get the Legislature to retain the Basic Science Law.

1. Full cooperation of our state Society. We mean every doctor delivered when called on to do so.
2. Our lay friends also worked hard.
3. Comments by the Supreme Court when it ruled that the Basic Science Law was constitutional. We would like for every doctor to read those comments.
4. The justice and fairness to the professions and protection to the public as set forth in the Basic Science Law.
5. The chiropractors in the public meetings demonstrated their unpreparedness and lack of skill in the Basic Sciences. They hurt their cause much by contending that diseases were produced by only mal-adjustment in the spine and that the five (5) basic sciences were not of value in treating diseases.

More effort was required in defeating H. B. No. 84 (Wright & Donathan) than any other one bill. This bill would have repealed our Basic Science law completely. We had to actively support H. B. No. 151 (Leflar) to get H. B. No. 84 defeated. We had only one vote against us in the final vote on these two bills.

House Bill No. 151 (Leflar), above mentioned, is now Act 63, and is now in full force and our Society should see that it is enforced. This Act blankets in all chiropractors whose licenses were issued up to January 15, 1940, and who were actually practicing in the state on that date, and blankets out all those who were not practicing on that date. There are 84 or 85 in the state and only 54 of these came in between 1929 and January 15, 1940. There are over 100 that have licenses between those dates that are blanketed out because they were not practicing in the state as of January 15, 1940. This date was selected because the Supreme Court gave its opinion on that date.

This Act also places the chiropractors under the Gant Malpractice Act, just as we are. They cannot employ solicitors, they cannot advertise their business, their adjustments or improbable statements, and they cannot legally collect a fee from any one by any promise that a manifestly incurable disease is curable.

The chiropractors do not like this law nearly as much as they did the plain Basic Science Law, and they are now getting ready to test the law. If the Supreme Court holds that it is good, they will almost be forced to quit as you know their advertising is what gets them business just as it did Brinkley and Baker.

We got H. B. No. 587 introduced by J. M. Jackson from Howard County and it was passed without much effort. This is the bill that this House of Delegates requested us to introduce (Annual Registration Bill).

House Bill 448 (Kesleys) passed, which provides that licenses may be revoked by the Examining Board when the licentiate has been convicted of a crime involving moral turpitude, regardless of whether or not the court later suspends the sentence or grants any leniency.

We were able to get Mr. James R. Campbell of Hot Springs to introduce and pass H. B. No. 602 which repeals the Act which provides that a retired medical officer of the U. S. Army could pay a fee of \$50.00 to the State Board of Health and thereby obtain the right to practice medicine when he had complied with the Basic Science Act.

The Budget Committee of the Legislature, at our request, introduced and passed H. B. No. 673 which levies a tax of .10 mill annually for our medical school. This is not a new tax. It had been used to retire Agricultural Credit Bonds. This will amount to about \$4,000 annually for the medical school.

Senate Bill No. 90 was passed which gives the medical school and University Hospital \$300,000 annually.

House Bill No. 750 was introduced and passed by the aid of the State Administration which sets up a building fund for the State Medical School and University Hospital. The amount of money derived by this bill is dependent. It takes the savings from the Charity Fund, that is, surpluses from the Sanatorium at Booneville, colored Sanatorium at Alexander and the State Hospital for Nervous Diseases. This money is to be used to build and operate a nurses' home and a building to care for the acute psychopathic wards at the University Hospital and to enlarge the operating department at the hospital.

We worked hard on H. B. No. 32 as requested by the Council of this Society. This was the re-organization bill for the State Hospital. It passed the House but lost in the Senate by one vote.

The osteopaths wrote a bill which would permit them to do surgery and we talked them out of introducing it which was not hard to do after the defeat of the chiropractors. They will come up next year with this bill.

There were many other bills carefully watched by your committee which were related in any manner to our profession, such as: the bills by optometrists and cosmetologists; also, marriage bills, none of which passed in such a manner that would affect our profession badly.

No bad bills passed. Senate Bill No. 210, by Dr. Abington, which provided that professional men whose licenses had been revoked could apply for reinstatement after a probationary period was vetoed by Senator Smith while acting Governor. The legal profession was more concerned over this bill as it was intended for some members of their profession. Several lawyers asked your committee to go with them to the Governor's office to prevail on him to veto it and we did.

Your committee kept in close touch with the profession throughout the session and we believe we carried out your wishes in every way. Each one of us expresses our sincere thanks to every man that helped us during this session of the Legislature and there were many of you. We especially thank the officers of the state Society, members of the Council, officers of the various county societies, the Governor of Arkansas and his secretaries. Last, but not least, we want to express thanks to our attorney, Senator Peter A. Deisch, for his splendid work.

COMMITTEE ON HEALTH AND PUBLIC INSTRUCTION

W. B. GRAYSON, Chairman

The Committee on Health and Public Instruction desires to report that general health conditions in Arkansas have been very satisfactory during the past year, with the exception of an epidemic of a mild type of influenza. The total number of cases reported to the State Board of Health was 20,371 against 8,796 in 1939.

We desire to thank and compliment the physicians of Arkansas for their improvement in early and complete reporting of all communicable diseases which they diagnose.

Diseases of the heart, nephritis, cancer, pneumonia, and tuberculosis were the principal causes of death in 1940. We continue to have too many cases reported of diseases for which we have known preventives, such as typhoid, diphtheria, and smallpox.

The Committee recommends that all physicians in Arkansas take advantage of the opportunity to improve in the diagnosis and treatment of tuberculosis by visiting the new sanatorium. With the enlargement of the bed capacity of the white tuberculosis sanatorium in Booneville, along with the enlargement of the negro tuberculosis sanatorium at Alexandria, which is from 30 to 200 beds, we believe more cases of tuberculosis can be arrested than ever before in the history of the state. The Committee believes that more facilities for the giving of pneumothorax should be provided over the state, even though there has been some increase in the establishment of these machines. It is our understanding that Dr. Riley, the Superintendent of the Sanatorium, welcomes visits of physicians to the institution to learn how to give these treatments, as well as to improve upon the diagnosis and treatment of tuberculous patients.

A great deal of attention is being given to nutrition these days, and it is the belief of this Committee that improved nutrition should come from the purchase of articles in the grocery stores, rather than synthetic preparations from drug stores. In other words, the people must be taught the value of pure and adequate food.

The syphilis control program in Arkansas is progressing, and it is the recommendation of this Committee that selectees who have a positive serology, and consequently are not accepted by the Army, should be given at least one year's energetic antisyphilitic treatment before being certified by the local draft board to the Army.

It is felt by members of the Committee that the general environmental sanitation program in the state has improved conditions, but that it should be continued, and every physician give active help in his community.

COMMITTEE ON SCIENTIFIC WORK

EUCLID M. SMITH, Chairman

The Chairman reported that the effort of the Committee was printed in the programs and that each member could judge for himself of the value of the work of the Committee at the conclusion of the scientific sessions.

COMMITTEE ON MEDICAL EDUCATION AND HOSPITALS

S. J. ALLBRIGHT, Chairman

We, your Committee on Medical Education and Hospitals, desire to submit the following report:

POSTGRADUATE MEDICAL EDUCATION:

Opportunity for further medical study was offered the physicians of the state in two ways during the year.

1st. A two-day postgraduate course was given in Little Rock twice during the year. This program consisted of clinics and lectures by members of the faculty of the medical school and two or three outstanding men from out of the state, and were arranged by the Committee from this Society. This Committee saw fit to cut the last course to a single session held in the evening. A more detail report will be presented by said Committee.

2nd. A refresher course on pediatrics was given by a man of recognized ability from out of the state in five cities in different parts of the state. The course lasted six weeks and was given one evening a week in each city. In some instances clinics were held in connection with the lectures and round-table discussions. All licensed physicians were invited to attend.

Neither the postgraduate course in Little Rock nor the refresher course in pediatrics had the attendance they deserved. Your Committee believes the physicians who do not attend these sessions miss an opportunity to learn the new and improved methods in practice that they can ill afford to miss.

Your Committee wishes to take this opportunity to suggest that some system of reporting from the hospital to the physician who sends indigent patients there be adopted. This, we believe, will be of educational value to such physician and will better enable him to care for such patients after they leave the hospital.

HOSPITALS:

A greater percentage of general hospital beds were occupied during the past year than for any year of which records are available. 1940 is the first time bed occupancy in general hospitals has reached 70%. Optional occupancy would probably be 75% to 85%.

Arkansas has shown increase in number of hospitals, beds per thousand population, patients admitted and average bed occupancy, but still is ranked lowest except one in beds per thousand population.

In 1938 Arkansas had 48 registered general hospitals. In 1940 it had 52. In 1938 Arkansas had 1.5 beds per 1,000 population. In 1940 it had 1.8 beds per thousand.

In 1938, 48,000 patients were admitted to these general hospitals. In 1940, 59,000 were admitted. In 1938 the average bed occupancy was 59% and in 1940 it was 62.2%.

The figures in this report are taken from the Report of the Council on Medical Education and Hospitals of the American Medical Association and do not take into consideration hospitals which are not registered, clinics, homes, physician's offices, etc., which are prepared to care from one to ten patients.

UNDERGRADUATE MEDICAL EDUCATION:

One of the most important questions to the undergraduate medical student at the present is his status in Selective Service. Those whose numbers have been

drawn have been deferred until the end of the school year along with all other college students. It is the opinion of our Committee that all medical students should be deferred until they have finished their four years in medical school. If the Selective Service plan is carried forward as anticipated many more medical men will be needed to meet the required needs of the Army, and unless some such plan is followed sufficient men will not be available.

The University of Arkansas School continues to be an Arkansas school for Arkansas medical students. The enrollment for the present year is 286. Compared with last year's enrollment of 278. 80% of those enrolled this year are from Arkansas and 86% of the freshmen class are from Arkansas. Of the total 1,829 physicians in Arkansas 446 are alumni of this Arkansas school. The total income for the school last year was \$212,000. \$1,000 of this was gifts and donations, \$86,000 was obtained from students' fees and \$125,000 from the state.

The University Hospital, which is managed in connection with the Medical School, has 205 beds and had a daily average of 155.8 patients for the year. 3,976 patients were admitted to the hospital and 13,213 were cared for in the out-patient department with a total number of out patient visits for the year of 72,936. An average of 288 patients per day each clinic day during the year.

Your Committee believes that need of new hospitals or additional beds in existing hospitals is a local problem for each community and that the physicians in each community are best prepared to know if such need exists.

The State Tuberculosis Sanatorium is doing a great work and while the waiting list is still too large it is hoped that some time in the future there will be no necessity for a waiting list.

The State Hospital for Nervous Diseases is still overcrowded and in need of many things. We regret that the recent legislature did not see fit to pass the bill reorganizing it.

COMMITTEE ON PUBLIC RELATIONS

W. T. WOOTTON, Chairman

The Chairman reported increasing use of the Health Talks of the Arkansas Medical Society by newspapers of the state and asked cooperation from members in having these talks published in local newspapers where not now used.

MEDICAL ECONOMICS

C. E. DUNGAN, Chairman

The purpose of this survey is to determine (1) whether the people as a whole are receiving adequate medical care, (b) The quality of this medical care, (c) The per capita cost, (d) Their ability to pay for medical care, and (e) The medical profession's ability to meet the demand.

(2) The economic status of the physician as regards cost of medical education; cost of maintaining his practice; financial return from his practice; and the doctor's place in the general economics of the country.

(3) A comparison of the different types of "Medical service plans for the low-income groups," an estimate upon their successes and failures, and improvements which may be offered to better distribute and improve the quality of medical service under our present plan.

In arriving at an opinion as to whether people of all classes are receiving adequate medical care, it must be determined what constitutes good medical care, in the opinion of those trained in determining the need and in administering medical service, as against the untrained who seek and demand medical care. It must be kept in mind that there is a great deal of difference in the "need" and "demand."

In marketing a commodity we want to know the facility of obtaining raw material; cost of such material; cost of production; quality of the product; cost of supplying the finished product to the consumer; the consumer's willingness and ability to pay for the article, and the profit return.

To market medical care in the United States we have available a personnel of more than 150,000 private physicians, with an investment in the cost of production, (education) of \$750,000,000, who have an investment in working equipment of \$700,000,000, and in hospitals, public and private, of almost \$6,000,000,000. If we were to add to this the auxiliary personnel of trained nurses, laboratory workers and those in public health departments, we should find that we have a sizable corps of workers and an enormous amount of money invested in the enterprise of caring for the sick in the United States.

How effective this set-up has proven to be is shown by the decrease in mortality from all diseases since 1900 of more than 39 per cent, and an increase in life expectancy of 24 per cent. The most significant improvement is in reduction of death rate for such diseases as typhoid fever, with a reduced mortality 94.7%, diphtheria 95.3%, from diarrhea and enteritis 89.6%, while tuberculosis mortality has been reduced 75.7%. In the decade from 1915-1926 infant mortality was reduced 48.9%. Later statistics would show further improvement over this figure. Maternal death has been reduced 28.7 per cent since 1926. Great reduction in maternal death and the incident of puerperal infection has been awarded in recent years, as well as that for other infections, notable in the pneumonias, which disease caused a death rate formerly of from 30 to 50 per cent, and is now reduced to 7.4 for all types. Many diseases which formerly assumed epidemic, and even pandemic, proportions, and killed people by the thousands have been almost or entirely wiped out by improved sanitation and immunization. Figures on infant malformation and deficiency diseases are indeed encouraging. Malaria, once the scourge of the South, has greatly been reduced in frequency, and death from that disease is infrequent. It is generally conceded that the general health is greatly improved and that time loss from illness has been greatly reduced.

It is interesting to compare statistics of this country, Canada, Australia and New Zealand, the only countries retaining private practice as the principal method of caring for the sick, with the European countries which have compulsory health insurance and government controlled medicine. In those countries the incidence of disease has increased, epidemics have spread, mortality from disease has increased, and the cost of medical care and hospitalization has almost doubled. They have the discouraging evidence that free medical care or that given on a prepaid basis encourages malingering and dishonesty. It is shown that those receiving medical care under such a system remain in hospital 50 per cent longer than under private hospitalization. This comparison encourages the theory that men perform more efficiently under a system of free enterprise and competition.

1. (a) It is estimated that the cost of medical care in the United States is about \$16.00 per capita. This includes hospitalization, laboratory, X-ray, surgery, and services of a specialist. This cost is influenced by localities and the economic status. Investigation shows that rural districts and small towns have a per capita cost of about one-third this amount. A survey by the American Medical Association shows that one-fourth of the population is indigent and a community responsibility, that one-fourth is self-sustaining with an income of \$3,000 or above, and that the other one-half, with an income of from \$1,500 to \$3,000, is largely self-sustaining under ordinary circumstances, but if a calamity hits them or a serious illness occurs, they may need some economic assistance. It has been estimated that if an income level of \$2,000 per family could be reached, most of the medical and economic problems would be solved. The total spent for medical care in 1929 in the United States was \$3,656,000,000. Physicians in private practice received a little less than one third of this amount, or \$1,090,000,000. At the same time the people spent for food and clothing \$25,452,000,000. For optional or luxuries, they spent for tobacco, \$1,600,000,000, for confectionery \$1,474,000,000, and for automobiles \$7,882,000,000. It is evident that the people of the United States can afford to pay what they do, or even larger amounts for medical care, if they were willing to make a fairer distribution of their income. The difficulty is not so much in the total amount as in the distribution. A case in point is a family with more than an average salary with a medical bill running for two years who spend \$12 a month for cigarettes and pay only \$5 a month on their medical bill.

(b) It is becoming increasingly more difficult for doctors to meet the demand for more and better medical care. Not so many years ago very little work was done in doctors' offices in rural sections, most of it was out-practice, house-to-house calls. Since people have become more health conscious they want to be checked over, and will come to the doctor for the most trivial affairs. While this is in keeping with good medical care, yet together with the serious illnesses of out-patients and maternity cases, frequently many miles from the doctor's office, it makes an almost overwhelming load for the doctors in small towns and rural districts where there are still very few hospitals. If more hospitals and treatment clinics with trained nursing personnel were established in the small towns of the country, with a supporting per capita tax, the busy doctor could spend less time at the bedside of his patients and more time at scientific study and research, and thereby render better medical service. This would encourage better distribution of doctors. The appalling increase in death rate following surgery justifies the warning and admonition that major surgery and other highly technical procedure should be limited to those with special training and special licensure. It is estimated that we have about 25,000 men in the United States doing surgery with a probable 10,000 qualified. A carpenter may be deft with his fingers and tools but to become a good carpenter he must know the quality and durability of wood. To be a good surgeon is also to be a good pathologist. To become a specialist is more than an ambition. It is an accomplishment after much hard work at study and training and can be acquired only by those with special adaptability. Most of us do well to attain the position as a good doctor. Few can become specialists.

2. Cost of medical education and maintaining a practice. It is estimated that the medical student spends from \$7,000 to \$10,000 for his medical education. The value of his time is not taken into account in this estimate. If he keeps abreast with improved methods and new discoveries he will spend a like amount for post-graduate study, research clinics, in laboratory work, and at medical assemblies for scientific discussions. The average cost of the equipment of a general practitioner is \$3,231, the average for the specialist is \$4,038; the average gross income of the doctor, all classes, is estimated at from \$6,000 to \$7,300. Of this he spends for the maintenance of his practice from 40 to 50 per cent. From surveying the incomes of doctors, state by state, we find that 51 per cent of physicians fall in the net income class of from \$1,000 to \$3,999, the higher average of net income of \$4,400, resulting from the specialist income of from \$10,000 to \$49,000. It is obvious from these figures that the medical student must have had other incentives than financial return to cause him to enter the medical field. If we could accuse him of being motivated by the financial attraction in the practice of medicine, we should also attach to him the ominous title, "The poorest business man." In addition to this we must remember that a doctor must be in practice three years before his income is more than his expense of operation, and that many in rural sections and in large cities may never make more than a bare living, incomes running as low as from \$500 to \$800. Some states have shown an average of from \$3,000 to \$5,000. A doctor must be in practice 17½ years before he reaches his maximum, and after 42 years he declines rapidly.

It must be kept in mind that the physician is selling medical service through the process of education primarily for the benefit of his patients, and not a commodity under high-pressure salesmanship solely for profit, and that when he lowers the price in proportion with his patient's ability to pay, he still sells him the best quality he possesses. When he assumes the position of a commodity salesman, using extravagant sales talk and dishonest claims for his product as is frequently done in commodity advertising, he is frowned upon, and rightly so, as a quack. He can not offer lower quality goods at a cheap price, for if he is a good doctor, all he has to offer is of the same quality.

It is said that if the physician were a better business man he would likely be a poorer doctor. Economists agree that doctors have an aversion to business details because of lack of business training, and because they fail to keep business records. We might add also that business becomes irksome to him because his interest is in his profession and the welfare of his patients. Even though he excuses his haphazard methods by saying he is a professional man, he should also be governed by the criteria that his income should be sufficient to enable him to give the best possible service and maintain his social status equaling the standard for his community. The medical student should be given training in simplified business methods as well as training in keeping a complete case record of his patients. The best addition to a doctor's office is an intelligent secretary who has the grace and interest to make his patients feel welcome and comfortable, and who can tactfully ascertain who will be responsible for payment for services, and when payment may be expected. This can be done without offense at the same time when the name and address is written on the case record. We would emphasize the importance of keeping a complete record of every thing done for the patient, including a copy of his prescriptions. This will

save the embarrassment on subsequent visits, of having to ask the patient what were his complaints when he was in before, and what he is taking. If systematic records are kept it not only makes one a more efficient physician but it enhances the pleasure of practicing medicine. We use a narrow slip of paper with the usual office services itemized on it, and at the right-hand margin opposite each item a blank space for the charge. At the bottom is blank space for payment and balance. This is filled out and handed to the patient when we have finished his service, at each office call. His payment is written on his case record in his presence, and his balance brought forward. This not only impresses him that we are keeping up with his case but that we also are keeping up with the status of his account. We find that this encourages him to help us keep down his balance. We would emphasize the importance of sending bills at the first of each month. Installment payment plans and buying on thirty days time has caused people to budget their income to meet the bills they have come to expect each month. If the doctor's bill is not among these monthly bills, his allowance will be left out of the budgeting. When this has happened for a few months, other obligations become more and more urgent, and too the baby may become ill again to add more to the already delinquent account. When this has gone for several months, or a year, you will begin to miss your good patient, and will see him chumming with one of your colleagues. If the doctor shows no interest in his accounts, why should others bother. If he needed money like other people, why would he not make insistent demands for pay like others do? That is what his patients say.

MEDICAL SERVICE PLANS

The development of methods for organizing payments for medical services has been a subject of much controversy, especially in the depression years since 1930. Literally thousands of articles and hundreds of plans for distributing medical services on some group payment basis have been publicized. There are now in operation Farm Security Associations in 31 states with a membership of 300,000. The Group Health Federation of America, Inc., links 17 different medical service plans. Impetus has been added to this "consumer movement in medicine" by the interest of women's organizations all over the country, and by a variety of religious, educational, industrial, and social service groups in the national "health problem for low income groups." County and state medical societies have worked out plans by the hundreds trying to reach some definite and workable plan for this group. Judged by the records, none of the plans have had smooth financial sailing. There are several reasons listed for their failure, namely, that members abuse the medical profession by demanding too much care for money expended, even calling doctors out on long trips when the patient is able to go to his office, that often no extra charge is added per family for surgery or maternity cases, or hospitalization. Many doctors have refused to cooperate in many of these set-ups because of the unreasonable demands made of him in their determination to get their money's worth, and that none of their assessment went to pay for the services of others, and because there was insufficient money pooled to pay for medical services. Clients have become dissatisfied because of curtailment of services when funds began to run low.

It is obvious that the load of the indigent patient has become too great for the doctor to carry, and that the principal part of the cost of his medical care and hos-

pitalization has become a public responsibility, and that some feasible plan must be worked out. We believe that a per capita tax for clinics in each county with hospital facilities for emergencies and maternity care offers a partial solution. We assume that organizations manifesting interest in giving better medical care to the underprivileged are sincerely interested in obtaining for this class a more abundant and compatible life, but we would disabuse the allusion that better medical care is the panacea for all human needs. As every doctor knows, if people could have good hygienic surroundings, good housing, good food and clothing, and were taught the simple exigencies of living and caring for their families in minor illnesses, the major problem of sickness would be solved in its incipency. All doctors recognize the greater incidence of disease and death among the poor. We offer the crusaders the formula of giving the indigent better living conditions, and better training in our common schools in the rules of health, and we will take the major responsibility for their illnesses.

SUMMARY

We believe the medical profession has sufficient personnel and equipment to give all the people adequate service if it were correctly distributed. We believe the American people still prefer their private physician and that their incomes would be sufficient to buy his services if they made a more equitable distribution in buying what they need instead of what they desire.

We believe that doctors could have an income from their practice more in proportion to the service they render if better and more punctual business methods were used.

We believe that keeping better case records and better financial records make better doctors, and that medical students should have training in business procedure.

We believe that better living conditions for the indigent would make for better health and that if the effort being put forth in finding a workable plan for cheaper medical care was used to that end, much of sickness problem for the indigent would be solved.

COMMITTEE ON CANCER CONTROL

FRED H. KROCK, Chairman

Your committee on cancer control wishes to make the following report on activities carried out during 1940:

Through the cooperation of the Woman's Auxiliary, units of the Women's Field Army were organized in several parts of the state with very gratifying and effective results. 823 enlistments were secured as follows: Batesville, 3; Brinkley, 5; Camden, Smackover, and El Dorado, 94; Fayetteville, 81; Fort Smith, 637 (of which 45 colored enlistments were voluntarily contributed through the efforts of negro physicians); and Texarkana, 3. The campaign of the Women's Field Army is going forward this year successfully in many sections of the state and it is to be hoped that an even greater response will be secured than in the preceding year.

Seventy per cent of this money was returned to the state for use as directed by your committee. In cooperation with the Women's Field Army, 14,750 pamphlets and articles on "Cancer" were purchased and distributed. Talks on "Cancer" were given before many lay organizations throughout the state by members of our state Society. The sound film, "Choose to Live," was purchased and shown before many hundreds of people during the past six weeks. Four projectors, each equipped with

strip films for six talks, were purchased for distribution among members of the Cancer Committee for use by any speakers who desire them. One cancer diagnostic clinic was given, and the results obtained, together with the favorable reaction of the public to it, indicate the need for extension of this service in the future. The expenses of last year's campaign of the Women's Field Army were paid off and this year's material paid for as ordered.

The Committee on Cancer Control was represented at a meeting with the State Board of Health and U. S. Government officials to discuss methods of cancer control. The federal government wishes to adopt a policy toward cancer similar to the one carried out with venereal diseases. Our committee wishes to go on record as being vigorously opposed toward this further step toward state medicine.

A bill was introduced in the last session of the legislature to provide a state hospital for the treatment of all cancer cases, and the establishment of state managed cancer diagnostic centers throughout the state. This bill, as such, was unanimously opposed by your committee on Cancer Control, based on the experiences of doctors in states such as Massachusetts where such a policy has been adopted and our own experience with what happens to the private practicing physician with reference to other state-treated diseases. In a modified form, after consultation with the Committee on Cancer Control, the undesirable features were eliminated and the bill was re-introduced. It failed to pass. Proposals of bills such as this serve to indicate the trend of public thought with regard to the rising death rate from cancer.

From the standpoint of new diagnostic or therapeutic aids in the treatment of cancer nothing new of importance has been reported during the past year. The cyclotron is undergoing technical improvements and experimental study apparently indicating that it may prove to be a valuable therapeutic ally. The need for education of the public concerning the fact that early cancer is curable and the danger signals of cancer with the necessity of reporting to the family physician once a year is still to be stressed. The public is intensely interested in this subject and all speakers before lay groups have been met with eager questionings and enthusiastic response.

COMMITTEE ON DISEASES OF THE HEART

A. G. SULLIVAN, Chairman

Your heart committee has made a survey of the mortality rate for heart disease in Arkansas over a period of twenty years. The results are visualized on the chart exhibited, and show an increase from 57 deaths per 100,000 population in 1920 to 153 in 1939, the last year for which figures are available. We have also charted the death rates for cancer, tuberculosis, pneumonia, malaria, and typhoid. Analysis of these curves suggests several interesting conclusions.

In the first place, the increase in heart disease is coincident with the decrease in deaths from infectious diseases. This suggests that in all probability more people are living to the age at which the degenerative diseases develop. This same situation, incidentally, may also be a factor in the increase in the cancer death rate. If this be true, we do not need to feel unduly concerned about the steady increase in heart disease, as death occurring in ripe old age should not occasion alarm for it actually means progress, the lengthening of life.

Unfortunately the international list of causes of death

still does not require an etiological diagnosis for heart disease. Under the general classification, Heart Disease, are the subheadings pericarditis, acute endocarditis, chronic endocarditis, valvular diseases, diseases of the myocardium, diseases of the coronary arteries and angina pectoris and other diseases of the heart. It is not possible to break down these figures accurately with one exception. On the other graph exhibited we have charted the actual deaths from coronary disease and angina pectoris. You will note the remarkable increase from 261 in 1934 to 584 in 1939. Here still another factor may be influencing our figures, i.e., increased accuracy of diagnosis.

In order to throw more light on this situation the committee last year compiled from their private and clinic records a summary of the etiological factors causing heart disease in this state. These figures vary in different sections of the country. For example, in New England rheumatic heart disease accounts for nearly 40% of all cardiac cases. This second chart shows the percentage incidence of the five principal types. These figures are arranged so as to show the various etiological types as they occur in chronological order, i.e., congenital 0.6%, rheumatic 15.8%, thyrotoxic 2.6%, syphilitic 15.6%, hypertensive 30%, arteriosclerotic 31.8%, and all other types 3.6%. Thus we see that the two types which occur predominantly in older age groups, the hypertensive and arteriosclerotic, together account for more than 60% of the total, which does lead us to believe that our increasing mortality rate is in the degenerative types. We would like to call attention to one type of heart disease which is subject to complete control and eradication, and that is the syphilitic. It has been amply demonstrated that adequate early treatment of syphilis prevents the development of syphilitic heart disease in later life.

On the whole this upward trend will probably continue for some time. Further reduction in deaths from infectious disease will probably continue. Unquestionably the introduction of the sulpha compounds will be a great factor. For example, reduction of pneumonia mortality to one-third of the present figures is bound to be reflected in later years in the increase in the diseases of old age. Taking everything into consideration then, your committee feels that though heart disease is still captain of the men of death, the situation is not one for alarm.

We wish to acknowledge the cooperation of the bureau of vital statistics of the state board of health in supplying the data used in this survey.

STUDY OF MIDWIFERY

J. B. JAMESON, Chairman

The Committee on the "Study of Midwifery" begs permission to make the following report based on information obtained from the office of the Arkansas State Board of Health. It appears that some progress is being made—we hope partly as a result of certain recommendations made last year.

There were six recommendations of the Committee which were approved by the House of Delegates at the 1940 state meeting:

1. That the Arkansas State Board of Health continue to issue permits to practice midwifery, but only to those whose applications are signed by the full-time county medical director or part-time county health officer. Approval of midwife applications on the recommendation of county nurses was deleted by the House of Delegates.

This recommendation has been followed during the past year. The State Board of Health issued permits to 905 midwives during 1940. Of these 905 midwives, 157 did not report any births during the year. The remaining 748 reported 5,487 live births or an average of seven live births per midwife permitted per year. There were 1,030 midwives who were not issued a permit in 1940 and who reported 3,618 live births. Of these 1,030 midwives reporting births without permits 458 had received permits in previous years and they reported 2,230 live births, or an average of five per year per midwife. The remaining 572 midwives had never been issued a permit and they reported 1,388 live births in 1940 or an average of 2.4 births per year per midwife. The number of other midwives practicing in the state and not reporting the births they attend is unknown. Thus the known figures show 1,776 midwives in Arkansas in 1940 attending 9,105 live births or one out of every four live births in the state.

2. The second recommendation of the committee approved by the House of Delegates was the establishment of prenatal clinics for indigents to be conducted by the county health officer or some member of the local society. Fifty-nine such clinics were established throughout the state in 1940 and they met 530 times during the year. A few of them were held once a week, most of them once a month, and a few at less frequent intervals. All of these clinics were conducted by health officers. The State Health Department has set aside funds to pay members of the county societies to hold these clinics, but has delayed starting this until they can obtain an obstetrician to manage it. A total of 1,576 women attended these clinics 5,259 times during the year, an average of 3.3 visits to the prenatal clinic per case. 626 of them attended the clinics for postpartum examination. 332 patients or 21% of all prenatal admissions were found to have a positive blood Wassermann. Public health nurses made 6,957 visits prenatally to 2,916 cases, an average of 2.4 prenatal nursing visits per case. The nurses made 4,737 postpartum visits to 2,052 cases, an average of 2.3 postpartum nursing visits per case.

3. The third approved recommendation of the committee was the furnishing of maternity bags to midwives by local American Red Cross Chapters. No information is available as to whether this has been done by any Red Cross Chapters other than in Garland County. However, each of the 905 midwives issued permits during the year and most of the 458 who had previously had permits provided themselves with a bag equipped according to instructions from the Health Department.

4. The fourth approved recommendation that "A Manual for Teaching Midwives" by the U. S. Children's Bureau, Department of Labor, be adopted as a uniform text has been followed. The local health department held 536 meetings during the year to instruct midwives. The total attendance at these meetings was 3,699. In addition, the nurses made 997 visits to supervise and instruct midwives.

5. The fifth approved recommendation was that the councilor from each district or some one designated by him contact county societies in his district to encourage them to adopt and sponsor this program. So far as is known nothing has been done about this recommendation.

6. The sixth approved recommendation was that in those counties without active medical societies the county health unit inaugurate this work. County health units in every county having any midwives have devoted some effort to this field of work.

In the body of the report of the committee last year, without any specific recommendation, it was stated that the ultimate goal of our campaign to be desired was "midwifery done by a graduate nurse from the office of or under the supervision of the county health units, to be paid from funds of the State Board of Health."

The State Board of Health has investigated the possibilities in this field and finds that the U. S. Children's Bureau will provide a limited amount of money to the State Board of Health to send graduate nurses away for a year's course in a school of midwifery, to return to the state and work in a county from the county health unit office.

From statistics obtained from the State Office, it will be noticed that of the number of births reported by midwives in 1940, approximately 30% came from six counties, the lowest of the six with 330 and the highest with 712.

The committee wishes to recommend to the House of Delegates that the State Board of Health be given authority and proper sanction to proceed as funds are made available to designate certain nurses to take this course in a school of midwifery and that they then be delegated to work in certain counties, only after the approval and with the sanction and blessings of the county society thus affected.

COMMITTEE ON SCIENTIFIC EXHIBIT

SAM PHILLIPS, Chairman

The chairman reported that the committee had arranged for a number of scientific exhibits which were now on display in the hotel and invited the members to study these.

COMMITTEE ON MATERNAL AND CHILD WELFARE

S. A. THOMPSON, Chairman

This committee met March 20, 1941, in the office of State Health Officer, Dr. W. B. Grayson.

The refresher course in pediatrics was conducted last summer by Dr. Jean V. Cooke of Washington University, St. Louis, on the circuit plan, at Fort Smith, Prescott, McGehee, Jonesboro and Searcy. The subject matter was well presented and very much worth our efforts. The attendance was again disappointing.

Due to disappointing attendance at these courses the following program is recommended for the next two years. The Health Department has \$1,500.00 available for this purpose each year. There being ten districts in our organization, one physician be selected from the odd number districts this year, and the even number districts next year. These physicians be allotted \$300.00 for one month's study in obstetrics, pediatrics or both at any reputable school. Records must be submitted to show this work has been done. The only obligation to this is that, when asked, this physician must appear on programs of our local organizations. These men are to be selected by the President, Secretary and Council of our Society with approval of the Department of Health. They should have been in a settled practice for not less than five years and not over fifty-five years of age. They are not to be selected from the larger cities or medical centers but from the smaller towns or rural sections.

Another recommendation is that the use of contraceptive methods and devices be taught to the indigent and physically unfit by the Health Unit Nurses in the various counties. (Not approved by Reference Committee.)

A full-time instructor on obstetrics having not yet been obtained, this matter was placed in the hands of the Health Department and our state secretary. They will, we are confident, get this program started soon.

Graph on details of causes of maternal deaths is presented by Dr. W. Meyers Smith.

STUDY OF MATERNAL DEATHS IN ARKANSAS—
JULY 1, 1938, TO JANUARY 1, 1941
W. Myers Smith, M. D.

The Maternal and Child Welfare Committee has co-operated with the State Health Department in sponsoring an investigation, which began in July of 1938, of each maternal death reported. A questionnaire is sent to each physician signing a death certificate which indicates that the cause of death had any relationship to pregnancy or the puerperium. The response has continued to be excellent. To date a total of 263 questionnaires has been returned covering 160 white and 103 negro maternal deaths.

It should be pointed out at the beginning that this study applies only to patients who died, and that we have no information about the almost one hundred thousand maternity patients who lived. We do not know whether the care given these patients is any measure of the care given all patients.

The question was asked if a blood Wassermann was taken both to determine the extent to which this procedure is being done and as a partial measure of the completeness of prenatal care, if any. Table 1 shows the results.

Table 1.
Maternal Deaths—Blood Wassermann Taken

	White	Negro	Total
Wassermann taken	23	9	32
Wassermann not taken.....	114	75	189
Not stated—unknown	23	19	42
Total.....	160	103	263

Omitting those cases on which it was not stated or was not known if a blood Wassermann had been taken, 10.7% of the negroes, 16.8% of the whites, or 14.5% of all of these cases had had a blood Wassermann taken. If these figures are at all indicative of the proportion of

general maternity cases on which a blood Wassermann is taken, then the Bill which passed both Houses of the last legislature requiring a blood Wassermann to be taken on every pregnant woman should be re-introduced in the next legislature since it has apparently been lost or stolen.

The response to the question as to whether a midwife had been present or handled the case is shown in Table 2.

Table 2.
Maternal Deaths—Midwives Handled Case

	White	Negro	Total
Midwife case	15	53	68
No midwife on case.....	119	36	155
Not stated—unknown	26	14	40
Total.....	160	103	263

Omitting those cases on which this question was not answered or was unknown, a midwife had been present or had handled 11.2% of the white and 59.5% of the negro maternal deaths, or 30.5% of all the deaths studied. Midwives attend approximately 9,000 or 25% of the 35,000 live births in the state each year. These figures should not be interpreted to mean that the midwife was directly responsible for all of these deaths at which she had been present. Some of the reports stated that while the midwife had been called she had not handled the case, and that the responsibility for the death rested directly on the patient. Some reports, however, specifically indict the midwife. The following quotations from the questionnaires illustrate this:

A 24-year-old married negress—"Patient had been in labor about 5 days with no progress. Was attended by midwife. Pelvic examination showed contracted pelvis."

An 18-year-old married negress—"Had been in labor about 6 days, being attended by midwife. Examination revealed hydrocephalus."

A 16-year-old single negress—"After being in labor with convulsions for 20 hours a doctor was called."

"This 23-year-old achondroplastic dwarf with a generalized contracted pelvis—was seen for the first time by a local doctor at—after she had been in labor for 48 hours with a midwife present."

There were several cases of sepsis following delivery by a midwife, 15 in all. There were 13 deaths from sepsis following deliveries by physicians.

Table 3 classifies the cases according to the prenatal care received and according to the medico-economic status of the patient as measured by payment of the physician's fee.

Table 3.
Maternal Deaths Classified as to Prenatal Care
and Medico-Economic Status

	White				Negro				Total				Grand Total		
	Full Pay	Part Pay	Charity	Not Stated	Full Pay	Part Pay	Charity	Not Stated	Full Pay	Part Pay	Charity	Not Stated	White	Negro	Total
Prenatal Care—															
None.....	16	23	44	4	19	19	36	6	35	42	80	10	87	80	167
Begun in first trimester.....	13	6	1		3	1			16	7	1		20	4	24
Begun in second trimester.....	1	6	7			1			1	7	7		14	1	15
Begun in third trimester.....	4	5	3		1	2	1		5	7	4		12	4	16
Not stated.....	3		8	16		1	3	10	3	1	11	26	27	14	41
Total.....	37	40	63	20	23	24	40	16	60	64	103	36	160	103	263

Omitting the cases on which prenatal care was not stated, 65.4% of the white cases and 90.0% of the negroes, or 75.0% of the total received no prenatal care. A total of 55 patients were reported as having received some prenatal care. Of these only 16 had had a blood Wassermann taken. Sixteen of these 55 patients were first seen late in pregnancy, and most of these made only one or at most two visits. Many of the patients seen in the first and second trimester of pregnancy were not seen again until in labor.

Of those answering the question 26.4% were full pay, 28.2% part pay, and 45.4% charity patients. Some prenatal care was received by 13.0% of the charity cases, 33.3% of the part pay patients, and by 38.5% of the full pay patients.

Table 4 classifies these deaths according to the cause of death.

Table 4.
Causes of Maternal Deaths

	White	Negro	Total
Abortion—criminal	10	3	13
Abortion—not stated criminal.....	23	18	41
Sepsis	19	14	33
Toxemias	55	45	100
Hemorrhage	14	5	19
Other	39	18	57
Total.....	160	103	263

The classification of criminal abortion does not include all such cases so reported since the onset of the study, because these deaths are classified as homicides rather than maternal deaths in the department of Vital Statistics, and the questionnaires have not been sent on such cases. The group of criminal abortions listed above includes only those so diagnosed from the questionnaire but not so classified from the original death certificate.

The classification as to causes of death is an arbitrary one by the writer of this report. The group of toxemias, which comprise 38% of the deaths, includes all forms of toxemia, pernicious vomiting, true toxemias, all cases with convulsions, and all cases with nephritic disease.

The case reports are now being copied removing all identifying data. A group of obstetricians will be asked to review these copies and classify them as avoidable or unavoidable deaths in their opinion. They will also be asked to review the obstetrical care described—judgment, technics, and procedures used in each case. This will probably require some time since preliminary reviews indicate that an average of 5 or 6 minutes is required for each case.

We thank our State Secretary, Dr. W. B. Grayson and Dr. W. Myers Smith for their cooperation in our work.

COMMITTEE ON SYPHILIS CONTROL
LOUIE G. MARTIN, Chairman

It is with pleasure that I report a meeting of the Committee on Syphilis Control on March 7, 1941, in Hot Springs, Arkansas.

The following members were present: Dr. W. J. Hunt, Dr. W. D. Goldstein and myself. Regret to say that Dr. L. F. Barrier was unable to be present. Dr. D. W. Dykstra, Director of the Venereal Disease Control, State Board of Health, and Dr. T. T. Ross, Assistant State Health Officer, met with your committee.

We first wish to congratulate the members of the State Health Department of Arkansas on the very

excellent work accomplished during the past year and for their full cooperation with our committee.

During the year of 1940 there was a total of 11,229 cases of syphilis reported to the State Health Department. Of these 1,740 were reported by private physicians; 9,489 were reported by members of the State Health Department.

There were 93,474 arsenical treatments administered to the 9,489 cases of syphilis reported by the personnel of the State Health Department and administered by them.

Distribution of drugs:
During this period there were
106,845 doses of Neoarsphenamine
3,780 doses of Sulfarsphenamine
26,260 doses of Mapharsen
195,900 ccs. of Bismuth subsalicylate, distributed by the State Health Department.

The laboratory of the State Health Department ran 107,700 blood Wassermanns of which 20,340 were positive, 74,147 were negative and 13,162 doubtful.

Spinal fluid Wassermann 707, of which 119 were positive and 588 were negative.

This confirms our report of the past few years that an average of one out of five spinal fluids will show positive.

There were 625 colloidal curves run on spinal fluid.
Included in the above report there were 6,365 serological tests run on selective service registrants. For this work the State Health Department was allowed \$1,764.42 for new equipment which will remain permanently in our state laboratory.

The State Health Department has published bulletins to its personnel stating that all patients that are not medically indigent should be treated by their private physician and that every assistance, including the supply of drug if necessary, should be furnished their physician.

Your committee has at present no definite recommendations to present to the Society, as it is our opinion that syphilis control in the state of Arkansas is progressing at a very satisfactory rate.

HISTORY OF THE ARKANSAS MEDICAL SOCIETY
FRANK VINSONHALER, Chairman

The chairman recounted the activities of the committee since its formation and stated that the committee had received four articles from past-presidents in addition to the research of the chairman. The publication of the History in the Journal will be completed within a few months and all members who desire bound copies are requested to notify the state secretary.

COMMITTEE ON INDUSTRIAL HEALTH
E. E. BARLOW, Chairman

Your committee is of the opinion that the interest of this Society should not be limited to occupational diseases alone, but should extend to all causes of lost time disability by workers in industry. We base our opinion on the following:

We have in Arkansas many thousands of gainfully employed workers engaged in hundreds of occupations, potentially hazardous to health. Most of these unhealthy

exposures occur in manufacturing plants and are found uncontrolled, principally in the small plants, which represent a large per cent of the total factories of our state. A great many of these small enterprises consider themselves unable to support health programs which extend beyond first aid, and the employment of physicians who treat emergencies and disability on call. In large plants industrial medical services have repeatedly demonstrated their usefulness in the reduction of compensation costs, the lowering of absenteeism, and general elevation of the physical welfare of the employees.

On the average each employee will lose about nine days of work each year, one day of which is due to industrial accident, and a fraction of a day to occupational disease. The balance of lost time arises from illness not assignable to industry.

These non-occupational health problems affect the regularity and continuity of working periods. They, together with the many subnormal and pathologic conditions which are uncovered by physical examination programs in industry, can, under proper medical guidance and organization, provide the medical profession with extraordinary opportunity to assist in the improvement of the physical welfare of employed groups, both by remedial and by preventive medical activity.

Your committee also feels that the organized medical profession in Arkansas should maintain a constructive interest in these industrial health problems, or relinquish leadership to other extra-professional agencies.

This interest arises directly from the extension of workmen's compensation benefits to occupational diseases and the need for prompt recognition of health hazards in industry, and the perfection of methods of prevention and control. Now that Arkansas has a compensation law to safeguard the injured workman, the carrier and physician, there should be medical membership in the compensation board. Only competent doctors of medicine can evaluate and determine the worth of medical evidence. Your committee and Dr. Brooksher, Secretary of State Medical Society, met with the state compensation board December 5th and discussed at length matters pertaining to the medical phase of the state law. At that time the board had just opened their office, and knew little about their job, but the entire board expressed a willingness to cooperate to the fullest with the state medical society. Some two weeks ago I called on the board and asked for further information that I might embody in my report, and they gave me the following:

From December 5, 1940-April 1, 1941

Total number of injuries reported to Commission.....4,967

Total number of Compensable cases.....1,245

Total number of Non-compensable cases.....3,451

Total number of Closed cases..... 271

Of Closed Cases—

Total Medical Benefits paid.....\$2,242.78

Total Hospital Benefits paid..... 151.93

Total number of cases involving dismemberments 55

Total number of cases involving hernia..... 31

Total number of Death Claims..... 12

In conclusion, your committee submits the following recommendations:

1st—That the scope of this committee be extended to cover all medical activity designed to improve or conserve the health of workers.

2nd—That this committee, in the future, be appointed

with the view of representing the three major medical groups involved:

(a) The private practitioner, general or specialist, who provides the majority of medical service to industry.

(b) The industrial surgeon whose experience is necessary to define proper standards of medical and surgical organizations within industry, and to evaluate the effectiveness of medical and surgical procedures recommended to improve industrial health, and lower the morbidity and mortality following industrial accidents.

(c) The medically trained industrial hygiene consultant whose experience is necessary to define occupational hazards, recognize new ones as they develop, and articulate this information with the medical profession so that proper precautions can be instituted for recognition and control.

3rd—To establish proper relationship between the physicians in industry and the employer, the employee, and the private practitioner. To clarify relationship between physicians and insurance companies. To elevate medical standards under workmen's compensation. To scrutinize all social legislation affecting the health of industrial workers, and to see to it that proper medical interest is expressed in such legislation.

4th—Your committee further recommends that activities of a similar nature should, under its guidance, be extended into the county medical societies wherever the degree of industrialization seems to warrant this step.

5th—Last, but not least, your committee recommends that provision should be made by the Arkansas Medical Society to send a delegate each year to the annual Congress on Industrial Health, which was created by the American Medical Association, and meets in Chicago each fall. The purpose of this congress is to study industrial health problems and to formulate ways and means by which they may be solved.

REPORT OF THE DELEGATE TO THE AMERICAN MEDICAL ASSOCIATION

E. E. BARLOW, Dermott

Dr. Barlow called attention to a report of the proceedings of the 1940 annual session of the American Medical Association as published in the September, 1940, issue of The Journal of the Arkansas Medical Society.

COMMITTEE ON MENTAL HYGIENE

A. C. KOLB, Chairman

Your committee prepared a bill for the purpose of reorganization of the State Hospital. It was introduced in the House and became H. B. 32. It passed the House by a vote of 55 to 20 but it failed to pass the Senate by one vote, the vote being 17 for and 12 against, 18 votes being necessary to pass any measure in the Senate. The bill provided for a Director of Hospitals and Mental Hygiene to be selected from a list to be furnished by the Council of the Arkansas Medical Society. The qualification of the director and superintendents was fixed at a minimum of five years' experience in the institutional care and treatment of the mentally ill. It also provided for a state-wide mental hygiene program looking toward the prevention of mental diseases.

Another outstanding feature of the bill was the provision with reference to discharge of the director and

superintendents. They could only be discharged after charges had been filed against them and then they must have been given a hearing before the Governor, Attorney-General and the Chairman of the Council. A majority vote of the three was then necessary for a discharge.

The bill provided for the repeal of the antiquated commitment law which was passed in 1882. Provision was made in the bill for voluntary admissions, admissions on certificate of two physicians, admissions on request of peace officer and admission on request of a health officer. Court commitments would be resorted to only when necessary on account of lack of co-operation of the patient.

Your committee feels that the feature which contributed most to the defeat of the bill was that pertaining to the five-year qualifications of the key men.

It is the opinion of your committee that we should continue to work for this bill or one of equal merit until its enactment is secured.

REPORT OF THE STATE MEDICAL BOARD OF THE ARKANSAS MEDICAL SOCIETY

D. L. OWENS, Secretary

I herewith submit, for your approval, the action of the State Medical Board of the Arkansas Medical Society since the meeting in Fort Smith, April 15, 16, 17, 1940.

There were fifty-eight applicants up before the Board during the year 1940 for examination. All passed the examination satisfactorily and were issued certificates to practice medicine in the State of Arkansas. There were six applicants for the primary examination, all of whom made passing grades. After submitting the necessary fee, thirty-one physicians have been certified to various other state boards during the past year.

After having presented satisfactory evidence of graduation from reputable medical schools, and having complied with all the necessary requirements of the law, eighteen applicants from other states, and the National Board of Medical Examiners, have been licensed to practice medicine in this state by reciprocity. This number is considerably less than the number which have been licensed by reciprocity during the preceding year or years.

Up to the present time, there has been registered with this Board, quite a number of physicians in this state who have been found guilty by the Federal Bureau of Narcotics. Of this number, most of these physicians are, at the present time, serving a sentence in some Federal Penitentiary or Federal Correctional Institute for the violation of the Harrison Narcotic Law. Others are on suspended sentence. This number, during the past year, has been much greater than that of any other preceding year. This shows that the Federal Government, through its Bureau of Narcotics, is being much more rigid in the enforcement of narcotic laws, and it behooves every member of the profession in this state to be very careful of the way in which he dispenses narcotics in his practice, and to keep a record of the narcotics which he uses.

Your Secretary attended the meeting of the Federation of State Boards in Chicago during February of this year, at which time many interesting facts were discussed and learned. One of the most important factors brought before this meeting was the question of whether or not the students in our medical schools and universities would be eligible for the draft, and whether or not they would be placed in a deferred class. It was the opinion

of all those present that all medical students should be placed in a deferred class, and a resolution to this effect was sent to the United States Draft Committee in Washington, D. C. Also at this meeting it was brought out by the representative from the Draft Board in Washington, D. C., that the Army and Navy would be calling about 8,600 physicians each year for their respective services for the next five years. At the present time the total combined graduates of class A medical schools in the United States is only 5,200 doctors per year, and since the Army and Navy only accepts graduates from class A schools, you can see that the number called will exceed the output by about 2,400 doctors per year. So if the students from the medical schools are allowed to be drafted into services, there will be a shortage of physicians in the United States for the next several years. Most of the medical schools are running to capacity at the present time, and if they have to increase their enrollment enough to meet and to take care of the deficiency caused by the enlistments in the Army Medical Corps as stated above, then quite a number of schools would probably lose their rating as a class A school. This is something that the schools and medical profession must not allow to happen, so you can see there is quite a serious problem facing the medical profession at the present time, because if this number of physicians are taken out of private practice, or if the medical students are subjected to being drafted before they have completed their medical schooling the problem will become quite serious.

We still have the question of the refugee physician, and the physicians who are graduates of foreign schools, coming before our Board. We are adhering strictly to the requirement set out in the law that the refugee physician is not eligible to come before our Board either by reciprocity or by examination. We also adhere strictly to the requirements laid down by our Board that no application be considered unless the applicant is a graduate of an A-class school as recognized by the American Medical Association.

This Board has spent untiring efforts to keep and maintain the standard of the medical profession in this state as the members of the Society would have us do, and as far as we know, our work since our last report to you, has been 100% efficient.

REPORT OF THE COUNCIL

R. B. ROBINS, Chairman

The Council has had three meetings during the year: September 8, 1940; November 20, 1940; and January 12, 1941.

On September 8, 1940, the Council met in Little Rock. Briefly, the following business was transacted: The Council disapproved a proposition for publication of a biography of Arkansas physicians by Robert L. Rice of Gulfport, Mississippi. A committee was appointed to confer with Governor-elect Homer Adkins relative to matters concerning medical affairs in the state government. A report on contract practice was received from a special committee of the Council.

On November 20, 1940, the Council met again in Little Rock. A committee was appointed to act in the interests of the Basic Science Law. Contract practice was discussed and a committee was appointed to further consider the subject.

The final meeting was held January 12, 1941, in Little Rock. The Council agreed to waive state membership

assessment of those physicians, in good standing in 1940, who have entered active military service in 1941. The Council authorized the use of a symbol in the annual roster of members to indicate those physicians whose wives are members of the Auxiliary. Provision was also made for assistance to the Auxiliary in the publication of a Year Book. The Council declined to set a fee schedule for laboratory services in selective service (later the Council approved such a schedule by mail vote). A State NYA Health Program was approved. The appointment of the state secretary as Health Consultant to the NYA was approved. Dr. S. J. Wolfermann, of Fort Smith, was appointed as a member of the State NYA Advisory Board. A proposed bill for the reorganization of the State Hospital for Nervous Diseases was approved. A resolution on the death of Miss Erle Chambers was adopted. The Council disapproved the establishment of a fee schedule for handling Workman's Compensation cases. The medical practice act was discussed.

The Chairman of the Council and the Society's attorney were appointed as a Committee of two to confer with railroad hospital boards relative to practice in railroad hospitals. The petition from Polk County Medical Society for acceptance of a certain physician into membership was declined.

This is, in brief, a report to you of the essential work of the Council during the year.

TREASURER'S REPORT

R. J. CALCOTE, Little Rock

Balance reported at last annual meeting, April 15, 1940	\$10,609.31
Receipts during year:	
Received of Secretary account of dues	\$8,500.00
Received of Secretary account of Journal	7,500.00
Interest on Saving Account.....	35.69
Dividends Savings and Loan Stock.....	112.50
Total receipts during the year.....	16,148.19
Total funds available during the year.....	\$26,757.50
Disbursements during the year, Vouchers Nos. 1107 to 1227.....	12,615.48
Balance on hand at close of business, April 12, 1941	\$14,142.02
April 12, 1941—Letters from:	
Pulaski Federal Savings & Loan Association stating balance	\$ 5,000.00
Commonwealth Federal Savings & Loan Association stating balance.....	2,500.00
W. B. Worthen Company (Savings Account)....	974.62
Commercial National Bank.....	5,667.40
	\$14,142.02

REPORT OF THE SECRETARY

W. R. BROOKSHER, Fort Smith

The past year has been one of unusual activity in the Society, engaging the interest of more members to the betterment of organization, the profession and the public. It requires no prophet to predict that the year which lies ahead will bring problems of acute interest to the medical profession and which will challenge the

collective and individual effort of the membership. Thereby lies, we feel, opportunity for a greater scope of the organization and for a more wholesome growth.

Ten months ago the Federal government solicited the cooperation of organized medicine in measures designed to bolster medical preparedness. Most county medical societies have appointed committees on medical preparedness; a number of societies have fulfilled every requirement of the preparedness program to date. Regrettably, several societies have been laggard in this respect. There is no question but that our country today faces a gigantic problem in defense against systems of government antagonistic to ours. The medical profession cannot afford to be derelict in its duties to our country. The last survey requested by the military authorities should be completed by May 1st. County medical societies are urged to complete this survey by that date.

One year ago 853 membership cards had been issued. Today the membership stands at 948. The attention of all is again called to the fact that membership becomes delinquent on April 1st.

During the past year income from membership assessments was \$5,190; income from advertising in The Journal amounted to over \$6,000. This is more than the cost of publication of our official organ. We again repeat that a fair sense of reciprocity demands that members, other things being equal, patronize those firms who have shown a most commendable desire to support the affairs of organized medicine by using our advertising columns.

During the year your secretary has attended the session of the American Medical Association, sessions of the national preparedness committee, five councilor district medical society meetings, innumerable committee meetings and county society meetings. Eleven lay groups have been addressed.

For the kindly support of officers and members in our duties, we express sincere appreciation.

REPORT OF COUNSEL

HON. PETER A. DEISCH, Helena

Annual registration has heretofore been required of eclectics, of chiropractors, of nurses, of lawyers and of engineers. The act passed by the 1941 Legislature providing for annual registration of all physicians to whom there has been issued a license by the State Medical Board of the Arkansas Medical Society is, therefore, making uniform the law of annual registration on all those who practice the professions. The act was passed in accordance with the mandate of the House of Delegates, as adopted at its 1940 session.

The annual registration act will serve to provide a much-needed compilation of doctors, for at this time there is no such register in existence among the regular profession, although such is enjoyed by other professions. Some secretaries of the board, in the past, have been clerical men, to whom the keeping of records was an agreeable task, and who, therefore, did that work well, but some secretaries failed to keep an orderly record of the proceedings, with the result that the records of the board are incomplete, even for the period when the state board came into existence in 1903, and there is no way of now knowing who are regular practitioners. The transporting of the records from place to place, when one secretary succeeded another, added to the confusion.

Under the annual registration law, when each and every doctor in Arkansas is required to register, a printed directory will become available, giving the name and address, and such other information as is desired, of every regular practitioner in Arkansas, and of those outside the state, who hold a license issued by the board.

All registration laws, including yours, provides that the right to practice is suspended when the licentiate has failed to register by a given date. It is the same as the operation of an automobile, after the date when the new license is required.

The proceeds derived from annual registration will provide a fund for the investigation of violations of the medical practice act, something that has been heretofore wholly lacking, and for which there is great need. Countless times have your officers and councilors been advised of apparent violations of the law regarding the practice of medicine, but there was little or nothing that could be done about it because of lack of funds. On January 13th and 14th of this year, I sat in one of the courtrooms of Pulaski County and heard the trial of a civil case against Dr. Brinkley, in which witnesses testified as to five different men, who had been practicing at his hospital, without authority of law to do so. Some of them were osteopaths, practicing outside of their calling, and who in addition, had no Arkansas license, and some of them were doctors from other states, who had neglected to get any kind of a license in this state. The same conditions existed as to the staff of the Norman Baker hospital, where many irregulars violated our laws with impunity. Investigations can hereafter be made, not only as to cases such as the ones mentioned, but as to other violations of our laws. If we had been enabled to pursue such a course with respect to violations of the Basic Science Law, the chiropractors would not have grown so numerous and prosperous as to have been able to make such a demonstration as they did at the late session of the Legislature.

The new chiropractic law makes them amenable to the Gant malpractice act, with the identical provisions as to untruthful and improbable statements in advertisements, as now applies to all doctors. On the floor of the House, during the debate on the chiropractic bills, advertisements were read and exhibited, that by no stretch of the imagination could be regarded as true, where cures were offered by them of incurable diseases, and of many infectious diseases that are great problems of medicine. This is now all prohibited, and under the annual registration law, can be suppressed.

The statement has frequently been made that Arkansas is the dumping ground for irregulars. That statement has never been true. Norman Baker and Dr. Brinkley practiced with far less hindrance, and for a longer period of time, in other states, than they did in Arkansas. For the past 10 years, our laws have been abreast, or have surpassed those of other states, as to cultists and irregulars, but they have not been enforced.

Now, however, all that will be changed, and the man who thinks he will find a haven of rest and prosperity in Arkansas, while he pursues his unlawful practice, will be disillusioned. No one will practice in the future without a basic science certificate; untruthful advertising will be suppressed; cultists will not practice outside the limits of their authority; the illegal sale of narcotics will not be permitted to continue, and gross incompetency can no longer bring disgrace to the profession. The State Medical Board, working in cooperation with the

council, will bring all these promises to pass. The cost will be small to the individual compared with the good that will ensue to the profession. The profession has been criticized for permitting unlawfulness to prevail, and our regulatory laws to be disregarded, when its officers had no means to prevent it.

The first registration will occur not later than July 1, 1941, when a certificate should be secured from Dr. D. L. Owens, of Harrison, secretary of the State Medical Board of the Arkansas Medical Society.

The House then proceeded to select the following Nominating Committee: 1st District, Ira Ellis, Monette; 2nd District, J. T. Matthews, Heber Springs; 3rd District, C. E. Dungan, Augusta; 4th District, J. M. Lemons, Pine Bluff; 5th District, R. C. Kennerly, Camden; 6th District, C. A. Archer, DeQueen; 7th District, W. G. Hodges, Malvern; 8th District, Robt. Hood, Russellville; 9th District, Ulys Jackson, Harrison; and 10th District, Fred H. Krock, Fort Smith.

Members present then proceeded to select nominees to fill vacancies from the 2nd, 3rd, 6th, and 7th, Congressional Districts on the State Medical Board of the Arkansas Medical Society. The House of Delegates adjourned at 11:45 a. m.

FIRST GENERAL SESSION

APRIL 14, 1941

The meeting was called to order by President Smith at 2:00 p. m.

The invocation was given by E. E. Barlow.

E. H. White, Little Rock, President, Pulaski County Medical Society extended a welcome to the Society.

Roy I. Millard, Russellville, responded to the address of welcome.

Vice-President Dixon took the chair.

President Smith read the annual President's Address (page 1).

The scientific program followed:

"Fitness for National Emergency," Nathan B. Van Etten, New York, President, American Medical Association.

"Significance of Cough as a Symptom," O. C. Melson, Little Rock.

"The Surgical Treatment of Hyperthyroidism" (with lantern slides and motion pictures), Geo. V. Lewis, Little Rock.

"A Resume of Fever Therapy in the Management of Syphilis," Kenneth Phillips, Miami, Florida.

"Hypertension," C. H. Finney, Fort Smith (read by the Secretary).

"The Nature of Thyroid Disorders," J. Harry Hayes, Little Rock.

The first general session then adjourned.

PUBLIC MEETING ROBINSON MEMORIAL AUDITORIUM APRIL 14, 1941

The meeting was called to order by E. H. White, Little Rock, President, Pulaski County Medical Society.

The invocation was given by Very Rev. Msgr. John J. Healy, Little Rock.

President H. T. Smith was then introduced and presided.

Mrs. A. A. Herold, Shreveport, Legislative Chairman, Woman's Auxiliary to the American Medical Association gave an address.

Nathan B. Van Etten, New York, President, American Medical Association, spoke on "American Health as Related to National Defense."

The benediction was given by Rev. R. D. Adams, Little Rock.

MEMORIAL SESSION APRIL 15, 1941

The meeting was called to order by President Smith at 8:15 a. m.

The invocation was given by Dr. Marion Boggs, Little Rock.

Mrs. I. B. Richardson, Mrs. H. E. Riley, and Mrs. W. R. Richardson, with Mrs. Conrad Farrell, accompanist, sang "The Lord's Prayer."

Mrs. S. C. Fulmer, President, Woman's Auxiliary to the Pulaski County Medical Society read the names of deceased members of the Auxiliary.

C. A. Archer, DeQueen, gave the memorial address and read the names of the deceased members.

MEMORIAL ADDRESS C. A. ARCHER, M. D. DeQueen

It is truly fitting that we pause in convention assembled to pay our respects to those of our number who have finished their task in our midst and have passed on to their haven of eternal rest. Words, at best, are but the mechanical means of expressing our innermost thoughts

and oftentimes fail us when we attempt to eulogize those whose service and sacrifice defy description in the language of men. However, men write their own eulogies in a manner far more beautiful than pen can recount. A testimonial to the memory of these departed is pictured in lasting characters in the hearts of those who received their ministry and those of us who labored with them in their efforts to alleviate the suffering of men. A tortured body relieved of its pain, the breath of life given its initial impulse, and the hand of death stayed in its grim purpose—these are the voices from along their way of life that cry out in beauty and strength: "They have not lived in vain; their work is well done; they have merited their rest."

They number thirty-two who will no longer help us in our task. The torch has been passed to those of us who remain. May we by all that is sacred and holy in our profession be true to our heritage of their courage and sacrificial spirit.

IN MEMORIAM

Caleb Ewin Witt, Little Rock, April 23, 1940.
Franklin Pierce Vines, El Dorado, April 29, 1940.
Francis M. Reed, Turrell, May 6, 1940.
William Lee Patterson, El Dorado, May 19, 1940.
William T. McDonald, Naylor, May 26, 1940.
Wayne Neal Freemyer, Little Rock, May 30, 1940.
Raymond T. Smith, Fort Smith, June 2, 1940.
Andrew R. Howell, North Little Rock, June 19, 1940.
Jacob S. Thompson, Stephens, July 10, 1940.
Charles R. Teeter, Russellville, July 13, 1940.
John Thompson Altman, Jonesboro, July 17, 1940.
Edward E. Carter, Arkadelphia, August 7, 1940.
John H. Murphy, Opal, August 14, 1941.
Hermann J. G. Koobs, Rogers, September 3, 1940.
Harry Lee White, Rondo, September 19, 1940.
Samuel Augustus Scott, Eudora, October 14, 1940.
Lee Edwin Biles, Augusta, October 15, 1940.
Adolphus G. Clyne, Paragould, October 21, 1940.
Archibald M. McKennon, Clarksville, October 23, 1940.
Sterling Price Bond, Little Rock, December 5, 1940.
Harry Hansel Preston, Hot Springs, December 8, 1940.
O. K. Hukill, Egypt, December 14, 1940.
Alex F. Williams, Cornerville, December 29, 1940.
Bart Wayne Freer, Fort Smith, December 29, 1940.
Paul Hamilton Phillips, Ashdown, December 30, 1940.
Thomas Joe Stewart, Wynne, January 7, 1941.
Henry Herbert Darnall, Fulton, February 11, 1941.
Isaac M. Huskey, Cave City, February 26, 1941.
William J. Robinson, Portia, March 11, 1941.
Frederick William Youmans, Lewisville, April 4, 1941.

The trio sang "A Saints Flavian Hymn."

The benediction was given by Dr. Marion Boggs.

SECOND GENERAL SESSION**APRIL 15, 1941**

The meeting was called to order at 9:30 a. m. by President Smith.

G. Wilse Robinson, Kansas City, was introduced to the session by M. L. Norwood.

The scientific program was then presented in order:

"Hypertension Associated With Unilateral Renal Disease" (with lantern slides), Carl Wilson, Fort Smith. Discussed by A. F. Hoge, Fort Smith, and E. E. Barlow, Dermott.

"The Bedside Diagnosis of Cardiac Arrhythmias," J. Driver Rowland, Hot Springs National Park.

"A Vaccine for Epidemic Influenza: A Preliminary Report," F. M. Acree, Greenville, Mississippi.

"Pain and the Menstrual Cycle," Jos. H. Sanderlin, Little Rock.

"The Control of Estrogenic Therapy During Menopause With Vaginal Smears" (with lantern slides), Julius H. Hellums, Dumas.

"Contraception Technique and Medical Indications" (with lantern slides), M. C. Hawkins, Jr., Searcy.

The second general session then adjourned.

THIRD GENERAL SESSION**APRIL 15, 1941**

The meeting was called to order by Past-President Geo. B. Fletcher at 1:45 p. m.

Vice-President I. Fulton Jones then took the chair.

The scientific program was then presented in order:

"Vincent's Angina," J. F. Lewis, Fayetteville.

"Endocrinology in General Practice" (with lantern slides), Daniel L. Sexton, Saint Louis.

"A Satisfactory Suprapubic Cystotomy" (with motion pictures), G. W. Reagan, Little Rock.

"Treatment of Intratrochanteric Fractures of the Femur" (with lantern slides), F. Walter Carruthers, Little Rock. Discussed by W. Vernon Newman, Little Rock, and F. Walter Carruthers, in closing.

"What Can We Do for the Patient With Arthritis," Leon E. King, Hot Springs National Park. Discussed by E. D. Rowland, Hot Springs National Park, and Leon E. King, in closing.

"Management of Urinary Calculi," H. King Wade, Hot Springs National Park. Discussed by H. Fay H. Jones, Little Rock.

The general session then adjourned.

FOURTH GENERAL SESSION**APRIL 16, 1941**

The meeting was called to order by President Smith at 9:00 a. m.

The scientific program was then presented in order:

"Geriatrics," R. H. Johnston, Clarksville. Discussed by D. W. Goldstein, Fort Smith.

"Sinus Disease is Curable" (with lantern slides), Virgil L. Payne, Pine Bluff. Discussed by Alan G. Cazort, Little Rock; Raymond C. Cook, Little Rock; and Virgil L. Payne, in closing.

"Replacement Therapy of Gonadotropics (Female)," G. R. Siegel, Clarksville.

"Caudal Anesthesia in Proctologic Surgery," H. A. Causey, Pine Bluff. Discussed, with lantern slides, by H. W. Hundling, Little Rock.

"Bronchial Asthma: Clinical Types and Treatment" (with lantern slides), Orval R. Withers, Kansas City. Discussed by Alan G. Cazort, Little Rock.

"Regional Enteritis: Summary: Case Report" (with lantern slides), J. B. Jameson, Camden.

"Alcoholism: A Public Health Problem," A. C. Kolb, Hope.

The general session then adjourned.

**SECOND SESSION
HOUSE OF DELEGATES****APRIL 16, 1941**

The meeting was called to order at 2:00 p. m. by President Smith.

The following delegates and members present, seated as delegates, answered roll call:

ASHLEY—M. C. Crandall; BENTON—Geo. M. Love; BOONE—Ulys Jackson; BRADLEY—W. J. Hunt; CHICOT—W. D. Easterling; CLAY—F. H. Jones; CLEBURNE—H. J. Hall; CLEVELAND—W. G. Hancock; COLUMBIA—W. P. Cooksey; CONWAY—W. P. Scarlett; CRAIG-HEAD-POINSETT—Ira Ellis, M. E. Blanton; CRITTENDEN—B. M. Stevenson; CROSS—A. F. Barr; GARLAND—H. King Wade, W. T. Wootton; HEMPSTEAD—A. C. Kolb; HOT SPRING—W. G. Hodges; INDEPENDENCE—C. A. Churchill; JACKSON—H. O. Walker; JEFFERSON—J. M. Lemons; JOHNSON—J. M. Kolb; LINCOLN—L. T. Taylor; LITTLE RIVER—B. C. Routon; LONOKE—E. S. Whaley; MILLER—L. J. Kosminsky; OUACHITA—R. C. Kennerly; PHILLIPS—A. H. Maddox; PULASKI—Jos. F. Shuffield, E. H. White, G. W. Reagan, Joe Sanderlin,

M. J. Kilbury, H. R. Allen; RANDOLPH—M. A. Baltz; SAINT FRANCIS—J. O. Rush; SALINE—Dewell Gann; SEBASTIAN—Fred H. Krock; UNION—H. J. Mayfield, A. D. Cathey; WASHINGTON—Ruth Ellis Lesh; WHITE—S. J. Allbright; WOODRUFF—C. E. Dungan.

Other members of the House of Delegates present were:

President H. T. Smith; Councilors L. T. Evans, J. O. Rush, S. W. Douglas, R. B. Robins, H. E. Murry, Euclid M. Smith, F. A. Corn, Jr., J. F. John and Clyde McNeil; Past-presidents E. F. Ellis, J. M. Lemons, L. J. Kosminsky, M. L. Norwood, M. E. McCaskill, W. H. Mock and W. T. Wootton, and Secretary Brooksher.

Fred H. Krock then presented the following report of the Nominating Committee:

President-Elect—S. C. Fulmer, Little Rock; R. B. Robins, Camden; H. A. Stroud, Jonesboro.

First Vice-President—H. King Wade, Hot Springs National Park.

Second Vice-President—C. C. Hanchey, De-Queen.

Third Vice-President—B. M. Stevenson, West Memphis.

Treasurer—R. J. Calcote, Little Rock.

Secretary—W. R. Brooksher, Fort Smith.

Councilor, First District—F. H. Jones, Piggott.

Councilor, Third District—J. O. Rush, Forrest City. •

Councilor, Fifth District—B. L. Moore, El Dorado.

Councilor, Seventh District—Euclid M. Smith, Hot Springs National Park.

Councilor, Ninth District—J. F. John, Eureka Springs.

Delegate to the American Medical Association (two-year term)—W. R. Brooksher, Fort Smith.

Alternate to the American Medical Association (two-year term)—H. T. Smith, McGehee.

By motion (E. H. White-W. G. Hodges) the name of S. C. Fulmer was withdrawn from the list of nominees for President-Elect.

S. J. Allbright and Jos. F. Shuffield were then appointed tellers and the House proceeded to ballot on the names of R. B. Robins and H. A. Stroud for the office of President-Elect. R. B. Robins receiving a majority of the votes on the first ballot and was declared elected.

By motion (L. T. Evans-Rush) the vote for R. B. Robins as President-Elect was made unanimous.

By motion (Kosminsky-Allbright) nominees for the other offices were declared elected by acclamation.

S. W. Douglas presented the report of the Reference Committee.

REPORT OF THE REFERENCE COMMITTEE

S. W. DOUGLAS, Chairman

Report of President Smith—The report of President Smith has been prepared in a very studious and scholarly manner and indicates in a very graphic way the immense amount of work that has been done by our officers, committees and others during the past year.

We heartily endorse the recommendation that the Legislative Committee should, at an early date, draft the medical legislation desired to be submitted to the House of Delegates next year for discussion before being submitted to the Legislature two years hence, that the members may have an opportunity of contacting the legislators during the campaign when influence can be most effective.

We particularly compliment President Smith and wish to express our appreciation of his efforts toward better medical legislation.

We approve his recommendations concerning the method of appointing the members of the State Board of Health in that, regardless of the fact that the present Board has always cooperated with and tried to carry out the wishes of the Society, conditions might arise where the appointment might not be agreeable to the Society.

If the law were changed to permit the naming of three members of the Society from each Congressional District list, the Governor should appoint one. There would be no danger of the health work getting out from under the influence of the Society, particularly if there should be a provision for the Board to select the Secretary as in former years. At the present time all members of the Board are members of the Society in good standing.

We approve the suggestion that each society unit should yearly devote one meeting to the discussion of medical ethics and we are pleased that our medical school has a course of lectures on that subject.

His remarks on contract practice are pertinent and timely and that subject should be kept constantly before us to protect us from the insidious effort of certain people to commercialize or socialize the practice of medicine. Any plan that permits the supervision of medical services by lay persons will not be successful from a medical standpoint and we are all familiar with the abuse that the various plantation owners and operators are indulging in when they send their employees to a state operated hospital for medical services, though they make sure that every other need is paid for by the employee, even to the extent of automobiles, radios and other so-called luxuries.

We approve the suggestion of the change in the Constitution to permit the establishment of a benevolent fund for indigent physicians and their wives.

Doctor Smith has worked so earnestly and well during the year that it is to be hoped he will for many years to come retain his interest and efforts toward improving the conditions under which we work.

Report of the Legislative Committee—This committee had a most difficult task but did their work with much honor. The Basic Science Law was saved and the chiropractors forced to comply with it and were also forbidden to solicit, advertise or collect fees on incurable

diseases. An annual registration bill was passed that will aid greatly in regulating medical practice. The act giving the State Board of Health authority to issue license to retired army officers was repealed. Three hundred thousand dollars was appropriated and a ten mill tax levied for the medical school. The reorganization bill for the State Hospital was lost in the Senate by a single vote, after being passed by the House. We commend the labors of this committee and urge even greater cooperation with them in the future.

Report of the Committee on Health and Public Instruction—The committee is honored to report continued improvement of public health in Arkansas. The physicians of the state are praised for their cooperation in this work. A word of warning is given relative to the increasing use of synthetic vitamins in place of good, wholesome food. There is much work to be done in the field of infectious and contagious diseases in the future. If we have cooperation, progress will continue to reward our labors.

Report of the Committee on Medical Education and Hospitals—We commend this committee on its thorough report. Regrets are expressed on the lack of interest and attendance at the postgraduate and refresher courses in pediatrics and obstetrics. The committee requests that the management of all eleemosynary hospitals of the state make a full report of each case to the referring physician, both for the educational value to the physician and for the after care of the patient. It is recommended that medical students be deferred by the Selective Service Board. The medical school, state and tubercular institutions are praised for their excellent service.

Report of the Committee on Medical Economics—The burden of this able report discusses the problem of caring for the indigent class, declaring that it is clearly the duty of the community and of the state. The physician cannot care for one-fourth to one-third of the population without some compensation. Under the present set-up, these people are receiving very inferior medical service, or none at all. Quacks, irregulars and patent medicine dealers thrive on this low income class. Physicians are urged to keep well posted so as to render high class and adequate medical service. Your committee recommends further study of the group plan as the many plans tried have been defective. It is believed that a per capita tax for clinics in each county offers a practical solution. The committee offers the crusaders for socialized medicine the following formula: Give the indigent better living conditions and better common school training in the rules of health and we physicians will take the major responsibility for their illness.

Report of the Committee on Cancer Control—The report of the Committee on Cancer Control indicates great activity and much progress during the year.

Report of the Committee on Heart Disease—The committee believes that the increasing death rate from heart disease is due to the decreasing rate from infectious diseases, whereby people live to an ever increasing old

age. It is urged that the etiological factor in heart disease be studied more thoroughly and that these people be taught how to live comfortably with their affected hearts. We look for further increase in the death rate, but this increase represents medical progress instead of medical failure.

Report of the Committee on Midwifery—The able report on midwifery is glad to show progress in this work. The committee recommends the issuance of certificates on duly certified applications. Nine hundred and five midwives were certified during 1940; 1,030 midwives practiced without being certified. There are many more midwives in Arkansas than physicians. Prenatal clinics for the indigent are recommended. Such clinics served 1,567 women in 1940. The furnishing of maternity bags to the midwives by the Red Cross is approved. Teaching midwives by personal instruction and by manual is urged. The county medical society is requested to sponsor this worthy educational movement. The good of this committee is that every midwife in the state shall be a graduate nurse, working under the county health unit or a reputable physician.

Report of the Maternal and Child Welfare Committee—We approve the efforts of this committee to stimulate the interest in the refresher course in pediatrics and maternal welfare. We do not approve the suggestion that contraceptive methods and devices be taught to the indigent and physically unfit by the health unit nurses in the various counties. This supplementary report by Dr. Meyers Smith indicates that the midwives reported 25 per cent of all births in 1940 and their death rate was 30.5 per cent.

Report of the Committee on Syphilis Control—The report of the Committee on Syphilis Control gave statistics showing the enormous amount of work in that line done during the year and expressing their opinion that syphilis control in the state is progressing at a very satisfactory rate.

Report of the Committee on Mental Hygiene—This thoughtful report urges a reorganization of the State Hospital, including the following vital points: a director and superintendent with five years experience, selected from a list selected by the Council of the Arkansas Medical Society; a state-wide civic program for prevention of mental disease and a more desirable method of commitment to the State Hospital.

Report of the State Board of Medical Examiners—Fifty-eight were licensed during 1940. Six men passed the primary examination. Thirty-one were certified to other state boards. Eighteen applicants have been licensed by reciprocity. The Board has received notice of a much larger number of convictions for violations of the national narcotic law and cautions physicians to post themselves as to the requirements of this law. The Committee recommends that all medical students be placed in a deferred class of the draft. If this is not done, the demand will exceed the output by about 2,600 physicians. The Board refuses all foreign physicians by either reciprocity or by examination.

Report of the Council—September 8, 1940, The Council disapproved a biographical history, being written by Robt. L. Rice. A conference committee to confer with the Governor-elect was appointed. A report on contract practice was received and infractions of the basic science laws were considered. January 12, 1941—Assessments of members in military service were waived. A roster symbol was approved to aid the Auxiliary. The N. Y. A. health program was approved. Reorganization of the State Hospital was approved. A request for a fee schedule for Workmen's Compensation was refused. Certain conditions in railroad practices are being considered. The large amount of business transacted during the year cannot be considered in a brief report.

Report of the Secretary—We heartily approve the report of the Secretary and advise closer cooperation with him in the Medical Preparedness Program and other urgent problems before the profession. We commend him for the generous use of his time in visiting the various societies.

Report of Counsel, Peter A. Deisch—The report of Hon. Peter A. Deisch was read with interest, especially his remarks concerning the new law requiring annual registration of all practitioners, and it is to be hoped the records will be so well kept that there will be no question as to who is entitled to practice under the law. There should be a substantial sum of money to be used in investigating the violation of the medical practice act. It is to be hoped the new chiropractic law will be enforced to prevent untruthful advertisement, and if that should come to pass, our troubles with the chiropractors would be a thing of the past.

By motion (Shuffield-Allbright) the Secretary was instructed to notify authorities of the provisions established by the State Medical Board of the Arkansas Medical Society.

By motion (S. W. Douglas-A. F. Barr) the report of the Reference Committee was adopted and the executive officers were instructed to carry out the recommendations to the best of their ability.

S. W. Douglas presented a resolution from the White County Medical Society, together with supporting data, relative to services of physicians in the Selective Service System.

By motion (S. W. Douglas-E. H. White) the following committee was appointed to draft a proper resolution covering this matter: S. J. Allbright, Searcy; L. T. Evans, Batesville; C. E. Dungan, Augusta.

S. W. Douglas presented as a constitutional amendment the following:

ARTICLE VI OF THE CONSTITUTION

To amend the first sentence which reads as follows: "The council shall consist of the Councilors, and the President and Secretary, ex-officio," by adding the words

"PRESIDENT-ELECT" and "TREASURER," so that this amended sentence will read:

"The Council shall consist of the Councilors, the President, the President-elect, the Secretary and the Treasurer, ex-officio."

By motion (Douglas-White) the proposed amendment was received.

By motion (Douglas-Krock) it was declared the intention of the Society that these officers be invited to sit with the Council during the coming year as if the amendment had been adopted.

Jos. F. Shuffield then presented a brief report of the activities of the Committee on Post-graduate Study for the past year, stating that the committee had over \$1,000 on hand.

By motion (Shuffield-H. O. Walker) the report was adopted.

By motion (Murry-Shuffield) the Society adopted a vote of commendation to Governor Adkins for his reappointment of W. B. Grayson as State Health Officer.

By motion (E. H. White-Rush) the following committee was appointed to study changes which would provide for a benevolent fund: H. T. Smith, McGehee; S. W. Douglas, Eudora; E. E. Barlow, Dermott.

By motion (Krock-H. O. Walker) a vote of thanks to the Pulaski County Medical Society, the citizens of Little Rock, the Arkansas Gazette, the Arkansas Democrat, and the Marion Hotel was adopted.

Hoyt R. Allen then presented for discussion the question that the state Society assume the total expense of the annual sessions. This was discussed by Hoyt R. Allen, Jos. F. Shuffield, M. E. McCaskill, J. M. Kolb, and L. T. Evans.

By motion (Allen-Kolb) it was recommended that the state Society defray the expenses of the annual session in excess of the funds acquired from the commercial exhibits.

By motion (H. O. Walker-Jos. F. Shuffield), presented to the House by H. O. Walker, the House stood in appreciation of the services of H. T. Smith to the Society during the past year.

By motion (Kolb-Shuffield) the following nominated for honorary membership in the Society by the Council were elected to such membership: M. Fink, Helena; A. E. Cox, Helena; W. C. Russwurm, Helena; C. K. Carruthers, Pine Bluff; J. J. Johnson, Harrison; M. C. Hawkins, Parkdale; E. E. Barlow, Dermott; E. Baker, Dermott; S. W. Douglas, Eudora; E. P. McGehee,

Lake Village; O. D. Ward, England; and C. C. Reed, Sr., Little Rock.

By motion (Kosminsky-Kolb) the following were nominated for affiliate fellowship in the American Medical Association: E. F. Ellis, Fayetteville; J. C. Gilliam, Des Arc; and M. L. Norwood, Lockesburg.

By motion the following nominations to the governor for selection to fill vacancies on the State Medical Board of the Arkansas Medical Society were confirmed:

Second Congressional District—J. T. Matthews, Heber Springs; O. J. T. Johnston, Batesville; and H. O. Walker, Newport.

Third Congressional District—D. L. Owens, Harrison; D. K. McCurry, Green Forest; and P. L. Hathcock, Fayetteville.

Sixth Congressional District—E. A. Callahan, Carlisle; J. M. Proctor, Hot Springs National Park; and W. G. Hodges, Malvern.

Seventh Congressional District—D. E. White, El Dorado; J. B. Jameson, Camden; and W. P. Cooksey, Magnolia.

By motion (W. J. Hunt-E. H. White) the House of Delegates adjourned.

FINAL GENERAL SESSION

APRIL 16, 1941

Immediately following the adjournment of the final session of the House of Delegates, the final general session was called to order by President Smith.

The following Past-Presidents came to the rostrum: W. T. Wootton, E. F. Ellis, W. H. Mock, L. J. Kosminsky, M. E. McCaskill, and J. M. Lemons.

W. T. Wootton and E. F. Ellis escorted H. Fay H. Jones to the rostrum where H. T. Smith presented him with the gavel stating that "It is a real pleasure to turn this over to a capable man."

H. Fay H. Jones spoke as follows:

"The holding of the office of President of the Arkansas Medical Society is an honor of which I am truly proud. Knowing the high standard set by my predecessors, I feel most humble and my only desire is that I may emulate them in so far that my efforts shall be acceptable to you. The success of any organization does not lie in the hands of the President, but rests in the support and cooperation given him by each individual member. It is my hope that during this year a strong spirit of cooperation shall prevail at all times, among the individual members, among the county societies and between all branches of the

society, so that much may be accomplished. I am sure your help and good will can be counted upon to see me through and lend the aid and advice I shall need.

"This spirit of cooperation is well expressed in a poem by J. Mason Knox:

" 'It ain't the guns nor armament,
Nor funds that they can pay,
But the close cooperation
That makes them win the day.

" 'It ain't the individual,
Nor the Army as a whole,
But the everlasting team-work
Of every bloomin' soul.'"

"May I say again that I appreciate the distinction of holding this office and will do my best to merit it."

L. J. Kosminsky and M. E. McCaskill then escorted President-Elect Robins to the rostrum where he thanked the Society for the honor conferred on him and pledged his best efforts for organized medicine.

L. J. Kosminsky then presented the invitation of Texarkana to hold the 1942 meeting in that city reading telegrams from the Chamber of Commerce, the Junior Chamber of Commerce, Mayor Elrod, and the Grim Hotel.

W. T. Wootton read the following telegram from A. S. Buchanan:

"Unavoidable circumstances prevent my attending my 39th consecutive meeting. Have Wootton extend invitation to meet at Prescott in 1942. May God bless you all."

By motion (W. G. Hodges-Ira Ellis) the invitation of Texarkana was accepted.

By motion (J. F. John-Allbright) the Society adjourned sine die.

REGISTRATION AT THE LITTLE ROCK SESSION

ARKANSAS—S. A. Drennen, M. C. John, Jr., C. W. Rasco, R. H. Whitehead, T. S. Van Duyn; ASHLEY—L. C. Barnes, H. E. Cockerham, M. C. Crandall, G. W. Fletcher, J. T. Herron; BENTON—Geo. L. Love, C. L. McNeil, W. A. Moore, A. L. Peacock, C. S. Wilson; BOONE—J. C. Blackwood, J. H. Fowler, J. G. Gladden, Ulys Jackson, H. V. Kirby, O. B. McCoy, D. L. Owens, W. H. Poynor; BRADLEY—W. J. Hunt, L. K. Hundley, Rufus Martin; CARROLL—J. F. John, D. K. McCurry; CHICOT—B. E. Barlow, E. E. Barlow, W. A. Craig, S. W. Douglas, W. D. Easterling, C. G. Leverett, E. P. McGehee, W. J. Schwarz; CLARK—J. P. Bremer, W. B. Prothro, H. A. Ross, T. T. Ross, C. J. Steed; CLAY—F. H. Jones, N. J. Latimer; CLEBURNE—H. J. Hall, J. T. Matthews; CLEVELAND—W. G. Hancock; COLUMBIA—J. J. Baker, W. P. Cooksey, T. H. Jones, H. M. Kitchens, G. F. McLeod, Joe F. Rushton, John H. Wilson; CONWAY—D. W. Dykstra, A. L. Goatcher, J. F. Halbrook, H. E. Mobley, W. P. Scarlett; CRAIGHEAD-POINSETT—M. E. Blanton, Ira Ellis, H. A. Stroud; CRAWFORD—F. G. Engler, S. D. Kirkland, S. S. Kirkland, O. J. Kirksey; CRITTENDEN—T. S. Hare, L. C. McVay, B. M. Stevenson; CROSS—

A. F. Barr, Thos. Wilson; DESHA—Gibbs Biscoe, Julius H. Hellums, H. T. Smith; DREW—R. D. Dickens, L. B. Jones, J. P. Price, J. S. Wilson; FAULKNER—M. Ruth Brittain, C. H. Dickerson, Ed Dunaway, N. E. Fraser, L. L. Hassell, J. S. Lieblong, I. N. McCollum, R. L. Taylor; GARLAND—L. N. Bollmeier, Frank Burton, B. F. Casada, G. C. Coffey, Geo. B. Fletcher, G. A. Hebert, L. E. King, O. H. King, L. G. Martin, Driver Rowland, J. F. Rowland, Euclid Smith, D. B. Stough, A. H. Tribble, H. King Wade, W. T. Wootton; GRANT—C. F. Cole, John W. Cole; HEMPSTEAD—G. E. Cannon, R. H. Foster, J. E. Gentry, A. C. Kolb, J. G. Martindale, Jim McKenzie, W. F. Robins, Don Smith; HOT SPRING—W. F. Barrier, Herman Brown, W. G. Hodges, Agnes C. Kolb, B. T. Kolb, M. D. Prickett; HOWARD-PIKE—E. V. Dildy, W. M. Gibson, R. L. Wood; INDEPENDENCE—Calvin A. Churchill, L. T. Evans, Frank A. Gray, Paul Gray, O. J. T. Johnston, Wesley J. Ketz, J. J. Monfort, Ralph E. Weddington, F. Q. Wyatt; JACKSON—K. K. Kimberlin, H. O. Walker; JEFFERSON—W. H. Bruce, H. A. Causey, T. J. Cunningham, Fred Hames, J. S. Jenkins, J. W. John, J. M. Lemons, A. R. Russell, Virgil Payne; JOHNSON—Geo. L. Hardgrave, Earle H. Hunt, J. M. Kolb, R. H. Johnston, Guy Shrigley, G. R. Siegel; LAFAYETTE—R. L. Armstrong; LAWRENCE—J. B. Elders, J. C. Hughes, T. Z. Johnson; LINCOLN—C. W. Dixon, L. T. Taylor; LITTLE RIVER—J. W. Ringgold, B. C. Routon; LONOKE—S. S. Beaty, J. F. Brewer, E. A. Callahan, F. A. Corn, E. H. Harris, S. A. Southall, E. S. Whaley, O. D. Ward, A. C. Watson; MADISON—Chas. Beeby; MILLER—J. W. Burnett, Wm. Hibbitts, R. R. Kirkpatrick, L. J. Kosminsky, C. S. Laws, B. C. Middleton, H. E. Murry, R. R. Robins, W. Decker Smith; MISSISSIPPI—Gean Atkinson, F. D. Smith, J. M. Walls; MONROE—W. L. Boswell, E. D. McKnight, N. E. Murphy; MONTGOMERY—J. H. McLean; NEVADA—W. B. H. Pool; OUACHITA—E. J. Byrd, J. P. Clemens, J. B. Jameson, R. C. Kennerly, B. V. Powell, T. E. Rhine, J. S. Rinehart, R. B. Robins, H. F. Thompson, S. A. Thompson; PHILLIPS—J. Q. Blackwood, W. W. Johnston, A. H. Maddox, H. H. Rightor; POLK—B. H. Hawkins, H. G. Heller, Pierre Redman; POPE-YELL—W. E. Ballenger, L. Gardner, J. K. Grace, A. C. Haney, Robt. Hood, Roy I. Millard, H. L. Montgomery, A. W. Rye, A. B. Tate; PRAIRIE—John H. Calley, J. C. Gilliam, T. G. Porter; PULASKI—J. L. Aday, J. S. Agar, Hoyt R. Allen, J. B. Askew, Paul Autry, Gerald Blankfort, B. P. Briggs, C. M. Brooks, T. Duel Brown, T. E. Burgess, R. J. Calcote, Robt. Caldwell, F. W. Carruthers, Alan Cazort, C. R. Chestnutt, Hoyt Choate, B. L. Church, A. C. Clark, J. F. Clark, J. N. Compton, R. C. Cook, K. W. Cosgrove, S. P. Cromer, Bryce Cummins, R. F. Darnall, J. C. Davis, E. O. Day, H. A. Dishongh, J. K. Donaldson, R. M. Eubanks, L. L. Fatherree, Theo. Freedman, H. Lee Fuller, Doyle W. Fulmer, S. C. Fulmer, Dewell Gann, Jr., Ellery C. Gay, Oscar Gray, W. B. Grayson, John E. Greutter, D. R. Hardeman, F. W. Harris, J. Donald Hayes, J. Harry Hayes, C. R. Henry, H. A. Higgins, H. G. Hollenberg, N. T. Hollis, D. T. Hyatt, H. G. Hummel, H. W. Hundling, H. Fay H. Jones, Glenn Johnson, M. J. Kilbury, W. A. Lamb, W. C. Langston, J. S. Levy, Geo. V. Lewis, M. E. McCaskill, J. R. May, Madeline M. Melson, O. C. Melson, Pat Murphy, W. V. Newman, J. E. Parsons, Jr., W. R. Parsons, R. Q. Patterson, Sam Phillips, G. W. Reagan, L. D. Reagan, B. James Reaves, D. A. Rhinehart, N. W. Riegler, W. C. Riggins, J. N. Roberts, Clyde D. Rodgers, C. A. Rosenbaum, R. E. Rowland, H. E. Ruff, W. L. Sadler, Jos. Sanderlin, S. M. Sanford, W. F. Shearer, A. C. Shipp, Jos. F. Shuffield, R. T. Smith, W. Myers Smith, W. A. Snodgrass, H. S. Stern, H. V. Stewart, A. W.

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Total members—384. Exhibitors—32. Visitors—124. Total—540.

REPORT OF THE COMMITTEE ON LIAISON WITH THE ARKANSAS TUBERCULOSIS ASSOCIATION

D. T. HYATT, Chairman

(Not presented to the House of Delegates)

Your Tuberculosis Committee submits the following report and recommendation:

You will recall that this Committee was appointed in 1938 by the state Medical Society to serve as a standing committee which might confer with the Arkansas Tuberculosis Association at any time on any matter which might come up during the year. The Committee was formed at the request of the State Tuberculosis Association.

There have been no matters brought to the attention of the Committee during the year, so there has been no meeting of the Committee as a whole. The Chairman of the Committee, being located in Little Rock, has had several informal talks with Dr. A. C. Shipp and with other representatives of the State Tuberculosis Association. The Chairman has found that there is a close cooperation between the Tuberculosis Association and the medical profession, and he believes that this cooperation will continue under the excellent leadership of the Association.

We regret very much the great loss sustained by the tuberculosis cause in the death of Miss Erle Chambers during the past year. She can never be replaced, but her work is being carried on in an excellent manner by her successor, Mrs. W. T. Dorough.

We are proud to report that during the past year Arkansas dedicated two tuberculosis sanatoria, one for white at Booneville, and one for colored at Alexander. This gives the state excellent facilities for hospitalization of the tuberculous patient but there is great need for additional beds for the negro. We would recommend

that the Medical Society use its influence to secure additional beds at Alexander in the near future.

We recommend that the Arkansas Medical Society continue to actively support the work of the various tuberculosis associations, state and county, and urge the individual physicians of the Society to give their hearty cooperation to the work of the Association. We recommend further that more physicians be placed on the boards of the associations and that such doctors take an active interest in the supervision of the tuberculosis program.

AUXILIARY REPORT

The Woman's Auxiliary to the Arkansas Medical Society sends greetings and presents the following report:

Organization—Arkansas has 20 active auxiliaries, some of them representing several counties. There are 369 paid-up members. Our auxiliaries are necessarily small, some with three to five members. Two members from one new county joined another county auxiliary because there were too few to organize by themselves.

Education and Public Health—Early in the year a survey was made of diseases most prevalent in sections over Arkansas and records sent to those respective counties where there are auxiliaries, that they might work on eradicating those diseases. Auxiliaries report splendid educational work done along these lines through our women and also through the P.-T. A. and other educational groups. Study groups have been formed in many of the auxiliaries for the purpose of learning more about socialized medicine, legislation, 10-point platform of American Medical Association and also interesting health subjects. The social side of the program has not been forgotten and some auxiliaries report more than one meeting a month. This committee has worked closely with the Public Relations Committee.

We have worked to acquaint the public with authentic facts regarding socialized medicine, health, cancer control, syphilis, tuberculosis and other diseases, and this has been done in various ways. For example, we have had public relations meetings, open to the public, with our splendid doctors as speakers, talking on some one of the above subjects. We have shown films on cancer before large groups such as the P.-T. A. and Business and Professional Women's Club. We have had radio talks and sponsored plays in the schools.

Hygeia—One of the Arkansas County auxiliaries won a prize of \$25 and another county won Honorable Mention in the recent Hygeia contest. Many of the auxiliaries doubled the number of Hygeias sold, and one county tripled the number sold. Hygeias have been placed in public libraries, school libraries, offices, homes, colleges and schools for white and negro children.

Ilse F. Oates Student Loan Fund—We have as our goal for this fund \$5,000.00. Four loans have been repaid in full during the year, the principal in full on another with the interest paid last year. Sixty-five loans have been made to date, five of them this year.

Physical Examinations—This phase of our work is always stressed and in some auxiliaries the report is 100%; always there is a good percentage of the women having physical examinations.

Doctors' Day Observance—This has been done in many ways, such as placing flowers in the offices of those living and on the graves of those who have passed away; by having splendid editorials and poems published commemorating doctors and by giving dinners in their honor. There is, too, an article in the state Journal.

Essay Contest—Some of the auxiliaries have sponsored essay contests, and the prizes offered have drawn many contestants; in one case particularly when the prizes were bird dogs.

Exhibits—A large number of auxiliaries contributed to the exhibits, and Arkansas will have an exhibit at the national convention.

Legislation—The Wagner Bill, the Wagner-George Hospital Bill and the 10-point platform of the American Medical Association have been stressed and many talks have been made all over Arkansas on these subjects this year. We cooperated with the medical society when a bill was introduced in the house to repeal the Basic Science Law. The bill was defeated. We have also cooperated with our doctors in the medical preparedness program.

Cancer Control—The Auxiliary is sponsoring the Woman's Field Army for the control of cancer in Arkansas. Last year Arkansas took in \$822.34. This year, one county alone has \$600.00; the total is not in yet. We have had many talks on cancer, and the film "Choose to Live" has been shown in many instances.

Library Fund Committee—This is a new committee this year, and through it we sponsored a state-wide campaign to raise funds for the libraries of the State Tuberculosis Sanatoria, both white and negro. We received \$779.18 this year and we plan to sponsor this again next year.

Jane Todd Crawford Memorial—Literature was sent out to be used in auxiliaries, and some money was raised for Jane Todd Crawford Memorial Fund.

Bulletin—Arkansas has stressed the subscriptions to the Bulletin through the Arkansas Journal and through the letters of the circulation manager of the Bulletin and through talks made by the State President. Arkansas has 23 subscriptions.

Philanthropic—There has been an increasing amount of work done along these lines through our Red Cross work and our tuberculosis campaign. Food and clothing have been given to institutions for poor and money has been given to crippled children. Supplies have been made for hospitals and W. P. A. Nursery Schools.

We have had splendid articles each month in our state Journal by state officers, committee chairmen and our publicity secretaries.

It was our very great privilege to have Mrs. V. E. Holcombe, our national President, as our guest during March. She gave an inspirational as well as an educational talk. We also feel honored in having had two special guests with us during our state meeting, April 14-16, Mrs. Arthur A. Herold, National Legislative Chairman, and Mrs. Pinson Neal, President of the Woman's Auxiliary to the Southern Medical Association. They speak to us during the convention.

New Officers for 1941-42:

President—Mrs. Calvin Churchill, Batesville, Arkansas.

Secretary—Mrs. F. Q. Wyatt, Batesville, Arkansas.

President-Elect—Mrs. L. G. Fincher, El Dorado, Arkansas.

1st Vice President—Mrs. C. W. Dixon, Gould, Arkansas.

2nd Vice President—Mrs. Fred Howes, Pine Bluff, Arkansas.

3rd Vice President—Mrs. J. B. Jameson, Camden, Arkansas.

4th Vice President—Mrs. H. T. Smith, McGehee, Arkansas.

Treasurer—Mrs. Fount Richardson, Fayetteville, Arkansas.

Historian—Mrs. C. W. Garrison, Little Rock, Arkansas.

Publicity Secretary—Mrs. Ralph C. Cross, Texarkana, Arkansas.

Parliamentary Referee—Mrs. C. H. Lutterloh, Hot Springs, Arkansas.

Respectfully submitted,

Mrs. Alfred H. Hathcock,
President of the Woman's Auxiliary
to the Arkansas Medical Society.

WOMAN'S AUXILIARY PAGE

MRS. H. E. MURRY, Publicity Secretary

The Woman's Auxiliary to the Arkansas Medical Society opened its seventeenth annual meeting in Little Rock, April 14, 1941, for a three-day session.

An executive board meeting was held on the morning of the 14th, followed by an executive board luncheon in the Hotel Marion. The general session began at 2 p. m. The meeting was called to order by Mrs. S. C. Fulmer, President of the Woman's Auxiliary to the Pulaski County Medical Auxiliary. Invocation was given by Dr. Warren Johnston. Address of Welcome by Mrs. R. C. Kory, Little Rock. Response to Address of Welcome by Mrs. Ralph Cross, Texarkana. Introduction of our state President, Mrs. Alfred Hathcock, Fayetteville. A report of the state officers and state chairmen were given at this time.

The report of the meeting of the Woman's Auxiliary to the Southern Medical Association was given by Mrs. W. T. Wootton, of Hot Springs; and the report of the meeting of the Woman's Auxiliary to the American Medical Association was given by Mrs. Fred Hames, Pine Bluff.

Mrs. Arthur Herold of Shreveport, legislative chairman of the American Medical Auxiliary, spoke at the afternoon session. A tea was held at the home of Mrs. Hoyt R. Allen.

The Auxiliary members attended a joint memorial service with the Arkansas Medical Society on Tuesday, April 15th.

The general session was held at 9 a. m., April 15th, on the mezzanine floor. The meeting was called to order by Mrs. Alfred Hathcock, President. Invocation by Dr. Marion A. Boggs. Address was given by Dr. H. T. Smith, McGehee, President of the Arkansas Medical Society. Reports were given by the district and county Auxiliaries. Greetings from the Woman's Auxiliary to the Southern Medical Association were given by Mrs. Pinson Neal, President, Columbia, Mo.

The following officers for 1941-1942 were elected: President, Mrs. Calvin A. Churchill, Batesville; President-Elect, Mrs. L. G. Fincher, El Dorado; 1st Vice-President, Mrs. C. W. Dixon, Gould; 2nd Vice-President, Mrs. Fred Hames, Pine Bluff; 3rd Vice-President, Mrs. J. B. Jameson, Camden; 4th Vice-President, Mrs. H. T. Smith, McGehee;



MRS. CALVIN A. CHURCHILL

Batesville

President, Woman's Auxiliary to the Arkansas
Medical Society

1941-1942

Historian, Mrs. C. W. Garrison, Little Rock; Publicity Secretary, Mrs. Ralph Cross, Texarkana; Treasurer, Mrs. Fount Richardson, Fayetteville; Parliamentary Referee, Mrs. C. H. Lutterloh, Hot Springs.

A luncheon was held at the Little Rock Country Club at one o'clock. Mrs. S. C. Fulmer, Toastmaster; Invocation, Mrs. Palmer Sheppard, El Dorado. Mrs. Alfred Hathcock, President, gave her annual report. Mrs.

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Oakwood
Ralph
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Wallace

SPA—

Hot Springs National Park

Arthur Herold and Mrs. Pinson Neal were guest speakers. Mrs. Herold installed the new officers. After the luncheon, Mrs. Churchill presided at a post convention board meeting.

The leadership and administrative abilities of Dr. Preston Hunt, President of the State Medical Association of Texas, and Mrs. William Hibbitts, President of the State Auxiliary, were highly praised Friday night at a dinner given in their honor at Hotel Grim by the Bowie-Miller Medical Societies and their Auxiliaries.

Principal tribute to Dr. Hunt was paid by Dr. N. D. Buie, of Marlin, President-Elect of the state Association, while the record of Mrs. Hibbitts was praised by Mrs. S. F. Harrington, of Dallas, President-Elect of the state Auxiliary.

Dr. Hunt and Mrs. Hibbitts responded to the words of praise with expressions of appreciation for the cooperation they had received during their respective administrations.

Dr. Allen Collom, President of the Bowie County Medical Society, presided at the opening of the dinner, and Dr. Julian Atwood, pastor of the First Baptist Church, delivered the invocation. Dr. Charles Adna Smith officiated as toastmaster.

The entertainment program featured vocal selections by Joe Lavender, accompanied by Mrs. E. S. Couch. Dinner music was furnished by Annie Laurie Rehkopf.

The dinner was arranged by three committees, headed by Dr. J. N. White as general chairman.

This is the **Last Call** for reservations for the Nineteenth Annual Convention of the Woman's Auxiliary to the American Medical Association which will be held at Hotel Carter in Cleveland, June 2-6. All Cleveland extends a hearty welcome to you!

Activities of the Sebastian County Medical Society Auxiliary for the last year were reported by the publicity chairman, Mrs. W. F. Rose May 5th at the last meeting before summer suspension at the home of Mrs. Everett Foster. The meeting was called a week earlier than the scheduled date because the retiring president, Mrs. Everett Foster, will be out of the city next week.

Seven open meetings have been held, Mrs. Rose's report showed. There now is a paid membership of 32. A contribution of \$10.00 was made to the Ilse F. Oates Student Loan fund. The Auxiliary presented subscriptions to the official publication of the medical association, "Hygeia," to the Girls' club, Young Women's Christian Association, Carnegie Library, Rosalie Tilles Children's Home, Booneville tuberculosis sanatorium and Wild Cat sanatorium. It contributed \$5.00 to purchase books for patients at both institutions; entertained at a luncheon honoring the past president of the Arkansas Auxiliary, Mrs. Alfred Hathcock, Fayetteville, and Mrs. Fount Richardson, secretary, also of Fayetteville, on the occasion of the state officers' official visit. The Auxiliary conducted a public health relations program with the

senior high school Parent-Teacher association, presenting Dr. T. P. Foltz as guest speaker.

The Auxiliary contributed \$103.00 to the cancer control membership campaign; presented Dr. Fred Krock to an open meeting for visitors at which an illustrated lecture on cancer was given at St. Edwards nurses' home; sold 18 subscriptions to "Hygeia"; and sent delegates and alternates to the state convention of the Auxiliary at Little Rock in April.

Mrs. Foster heard reports from all committee chairmen and expressed appreciation for the co-operation of members, officers and committee chairmen, before the installation of the new officers, who are: Mrs. Charles T. Chamberlain, president; Mrs. B. C. Ware, of Greenwood, secretary, to succeed Mrs. J. S. Southard; Mrs. J. L. Kellum, treasurer, succeeding Mrs. S. P. Stubbs. Mrs. Foster automatically becomes vice president, Mrs. W. F. Rose was appointed publicity chairman by Mrs. Chamberlain. Other appointments made by the new president include the following: Mrs. T. P. Foltz, chairman of public relations; Mrs. W. F. Adams, "Hygeia"; Mrs. Fred Krock, telephone chairman, with Mrs. Ralph Crigler and Mrs. S. P. Stubbs, members of the committee; Mrs. J. S. Southard, program; Mrs. S. J. Wolfermann, cancer control; Mrs. Everett Moulton, courtesy.

Mrs. Wolfermann, state commander of the Women's Field Army for Control of Cancer, reported that \$800.00 was collected in the tenth district in memberships. Of this, \$615.00 was from the city of Fort Smith, including the Auxiliary's own contribution of \$103.00.

Mrs. W. R. Brooksher reported highlights of the state convention in Little Rock, where a poster made by Mrs. L. B. Bryan, representing the year's work of the Auxiliary of Sebastian county, won second place and was selected to be sent to Cleveland, Ohio, for exhibit at the convention of the American Medical Association and its Auxiliary to be held June 2-6.

The Auxiliary voted to entertain the physicians at a party at the home of Dr. and Mrs. T. P. Foltz, a date to be set later. Members in attendance at the meeting were Mrs. Charles T. Chamberlain, Mrs. I. F. Jones, Mrs. Everett Moulton, Mrs. E. E. Scott, Mrs. W. R. Brooksher, Jr., Mrs. S. J. Wolfermann, Mrs. S. P. Stubbs, Mrs. T. P. Foltz and Mrs. W. F. Rose.

Mrs. W. F. Rose,

Publicity Chairman of the Auxiliary of
the Sebastian County Medical Society.

BOOK REVIEWS

Plague on Us: By Geddis Smith. Pp. 365. Price \$3.00. New York: The Commonwealth Fund, 1941.

This book is not well titled as it is a clear and lucid explanation of the entire subject of epidemiology, of interest to physician and layman alike. The great epidemics of history are discussed, together with theories of causation, reactions of the individual and the crowd to epidemics, and means of defense.

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No. 2

VINCENT'S ANGINA AND TONSIL- LITIS: BISMUTH TREATMENT†

JAMES F. LEWIS, M. D.
Fayetteville

Among the multitude of ills that afflict man, Vincent's infections of the mouth and throat are important because of their frequent occurrence, and also because proper diagnosis and treatment may prevent later complications. Vincent's angina has not been so frequent the past winter, but was very common the two years preceding (1). This may be explained, perhaps, by the variations in virulence which pathogenic micro-organisms commonly show from year to year (2), depending upon complex factors.

Looking over the literature on Vincent's infections one notes that numerous papers on the subject have been read before medical meetings in the past few years. However, to quote from an article in the Journal of the American Medical Association of March 29, 1940, by Field (3), "Fuso-spirochetosis, or Vincent's infection, has not yet received adequate attention from a majority of the medical profession * * * Grades of infection in the throat and lungs less severe than the usual textbook pictures are relatively frequent, and they are commonly not correctly diagnosed."

There seems to be considerable confusion as to the origin of Vincent's infections of the mouth and throat. Certainly there is some element of contagion and some tendency to spread of these infections in epidemic form, but there are many bacteriological and clinical observations which indicate that most fuso-spirochetel infections arise from endogenous foci.

Bacteriology

The various spirochetes, the fusiform bacilli, vibrios, staphylococci, and streptococci which form this symbiotic group of micro-organisms, are present in the mouths and throats of almost

all individuals. It takes, apparently only some factor lowering tissue resistance to set the stage for an invasion. This phenomenon of bacteria lying latent and striking at a "locus minoris resistentia" is one of the cardinal concepts of medical bacteriology (2). Various authors (4) have reported finding Vincent's organisms in 80-90% of normal individuals. Therefore, treatment (of which more will be said later) should be based on clinical evidence of disease as well as the finding of spirochetes and fusiform bacilli in **significant** numbers in smears.

As any physician doing clinical microscopic work realizes (or should realize), bacteriological diagnosis in some types of infections is not as clear and as definite as is generally assumed. Typical cases of Vincent's stomatitis or Vincent's angina usually show great numbers of spirochetes and fusiform bacilli, but less severe degrees of the same type of infection, without membrane formation, may occur (1) (3) and can be diagnosed by clinical manifestations and laboratory examination. I have been making throat smears by a suction technique* the past three years and find that smears of material aspirated from inflamed or/and enlarged tonsils often show spirochetes and fusiform bacilli in significant or even in predominant numbers** while smears made from ordinary throat swabs of the same tonsils will show only occasional spirochetes and fusiform bacilli (with various cocci predominant).

I have tried this technique a few times on excised tonsils and failed to find significant numbers of Vincent's organisms. It may be that the ether used in anaesthetizing the patients dried the tissues and disrupted the bacteria. My ob-

* Gradwohl (5) describes this technique, also Kracke & Parker (6). I use a suction pump with a glass tube shaped like a medicine dropper, but longer, attached. The wide end of the glass tube is pressed against the tonsil and smears are made of the aspirated muco-purulent material which collects around the inside of the open end of the glass tube.

** These findings do not depend upon the aspiration of plugs of necrotic material from the crypts.

† Read before the Sixty-sixth Annual Session, Arkansas Medical Society, Little Rock, April 16, 1941.

servations lead me to believe that a considerable proportion of acute and chronic tonsillitis is due to fuso-spirochetal infection. Hemolytic streptococci are thought to be the main etiological agents in acute tonsillitis (7), but it is quite possible that the fusiform bacilli and spirochetes play a more active role than they are ordinarily thought to play.

Two studies may be cited which offer some evidence suggesting a frequent etiological connection of Vincent's organisms with tonsillitis. Lebron (8), of Puerto Rico, reported (among other findings) that hemolytic staphylococcus aureus and hemolytic streptococci were the predominating organisms in the crypts and interior of 100 pairs of tonsils examined. He stated that, "simple swabbing of the throat, even if carefully done, is not a very reliable index of the organisms predominating in the crypts" * * * "**Vincent's angina** is a common infection in Puerto Rico" * * * "The direct smear must never be omitted when swabs from pathological throats are sent to the laboratory for culture." Bartlett (9), writing on "Streptococci isolated from excised tonsils and post-tonsillectomy blood cultures," reported that "the percentage of fusiform bacilli found in the inner surface of tonsils has seemed of particular interest and is far greater than was expected. These organisms are not supposed to be invasive, and their appearance in 36% of the cultures is hard to explain. It is possible, of course, that they were carried in from the outside of the tonsil, and it is hoped that further work will answer this question. However, although the technique used was not especially favorable to their growth, they were found in more than a third of the cases."

Pathogenicity of Vincent's Organisms

The pathogenicity of Vincent's organisms has been for a number of years a highly controversial subject. Some authors, among them Brenneman (10), Lichtenberg et al (11), and Black (12), have argued that they are almost purely saprophytes, but the weight of experimental evidence and years of clinical experience favors the view that they are definite pathogens when a "locus minoris resistentia" presents itself in respiratory tract or in various other localities. Smith (13) has shown that the spirochetes and fusiform bacilli, along with various vibrios, staphylococci and hemolytic streptococci, form a symbiotic group which, acting as a group, fulfill Koch's postulates.

Vincent first reported on the spirochetes and fusiform bacilli in connection with hospital gan-

grene, which is very uncommon now, but used to be a terrible scourge in surgical wards. Somewhat later he described the throat infection. Other observers had reported similar findings in mouth and throat somewhat earlier (Plaut and Miller).

Broncho-plummonary fuso-spirochetosis was described nearly 40 years ago, but thought to be a rare tropical disease until recent years. Now it is thought to be fairly common.

Some authors now believe that lung abscess, pulmonary gangrene, and bronchiectasis are almost always due to Vincent's infection.

Venereal fuso-spirochetosis is now commonly recognized and the term "Fourth Venereal Disease" has been applied to genital lesions (erosive and gangrenous balanitis and ulcerative vulvitis). In a series of 622 cases of venereal disease at the New Orleans Charity Hospital there were 37 cases of genital fuso-spirochetosis (14). Puerperal infections of fuso-spirochetal etiology are not uncommon.

Pathological studies show (4) (15) in the typical ulcerative progressive type of Vincent's angina three zones: The first zone is an external necrotic layer of dead tissue and masses of bacteria of all kinds (cocci and long threads of leptothrix-like organisms). The fusiform bacilli and spirochetes are infrequent in this area. The second zone is partly necrotic. In it there are small lymphocytes and monocytes with infrequent pus cells. In the third, the inner zone, spirochetes occur practically alone accompanied by only an occasional fusiform bacillus. Here the tissue cells look normal and there are no pus cells.

In the mild diphtheroid type of lesion only fusiform bacilli, vibrios, and cocci, are present.

Kracke and Parker (6), in describing venereal fuso-spirochetosis, report that "biopsy with the silver impregnation method of Levaditi will show an abundant amount of bacteria present, with an invasion of the fuso-spirochetal organisms into apparently healthy tissue with the spirochetes further advanced than the rest of the symbiotic group."

Clinical Observations

As is well known to all physicians, Vincent's angina must be distinguished from diphtheria, from acute hemolytic streptococcal anginas, from syphilitic lesions, and various rare affections of the tonsil. We may begin encountering more cases of agranulocytic angina because of the fre-

quent administration and readministration of the sulfonamide drugs.

One characteristic observation in Vincent's angina is the foul odor, and this is important in clinical diagnosis. Another practical diagnostic point is the frequent co-existence of mouth and throat infections.

Exact terminology separates fuso-spirochetal mouth lesions ("trench mouth," "necrotic gingivitis," "ulcero-membranous stomatitis" and other terms are used interchangeably), from the throat lesions ("Angina" is defined as "inflammation of the throat"). However, they frequently co-exist and physician and dentist should work together to forestall the development of chronic mouth or tonsillar infections.

I should like to outline the natural history of Vincent's infections of mouth and throat (speaking of infections of endogenous origin) as they may manifest themselves at various periods in man's life.

Infants must pick up these organisms fairly early. They are sometimes present in considerable numbers in gums traumatized by dentition and often seem to lead to a more or less severe tonsillitis (without membrane formation but with lots of Vincent's organisms present) in these small victims (1). I believe this is the cause of some fairly severe febrile episodes during dentition. Children whose parents have pyorrhea seem most prone to trouble of this sort.

An interesting observation, which many clinicians will endorse, was made by Stahr (16) before the Iowa State Medical meeting in 1937. "It is our impression that Vincent's infection adds its bit to many of the pharyngeal infections among children. This has been proved time after time, when, with an apparent ordinary nasopharyngitis, there comes an additional severity of involvement which promptly subsides under treatment for fuso-spirochetosis." This author mentioned using hydrogen peroxide as a gargle or spray and sodium perborate paste in treatment, but went on to say that, "in small children who are unco-operative in local treatment. * * * Bismuth injected intramuscularly seems to be of great value."

Another invasion of gum and of pharyngeal lymphoid tissue comes at the time of second dentition when there are decayed baby teeth hanging loose and permanent teeth pushing through. This is the age group in which we see the greatest

incidence of acute and chronic tonsillitis. Most often, perhaps, there is nothing we can do about it except pull the bad teeth and take the tonsils out. However, tonsillectomy is attended by no small amount of risk and many physicians feel that tonsils are useful to the human economy if they are not too badly diseased or too much enlarged. It is possible that we may be able to avoid chronic tonsillitis and tonsillar hypertrophy in many cases if we handle these children correctly. The acute anginas that are so frequently seen at this age, associated with gingivitis, may not call for any treatment other than hot saline gargles or local applications, but they are apt to be severe, are apt to last many days, may lead to otitis media or bronchitis, and an injection or two of a bismuth preparation is usually curative. Adequate care by a good dentist is important. Hydrogen peroxide, diluted one-half, as a mouth wash 6 or 8 times daily is rather effective and is probably much better than sodium perborate (17). Numerous and sundry antiseptics applied topically have been reported helpful. Mapharsen powder applied locally once daily is used in many dental clinics nowadays and cures are usually reported after a few days. Dental care implies more than just application of medicinals, however, as will be mentioned later.

Another peak in the incidence of Vincent's infections of the mouth and throat occurs at the age when young people begin to erupt their wisdom teeth. A partially erupted wisdom tooth frequently gives rise to an infected gum pocket, ideal for the growth of these anaerobic organisms. Probably the majority of the severe Vincent's infections we see in college students begin in such pockets and spread to the rest of the mouth and frequently to the throat also. Some other common predisposing factors are the presence of decay at the gum line, or silver fillings irritating the gum tissue, traumatic occlusion, accumulation of food between the teeth, accumulation of tartar, smoking, and vitamin deficiencies. It is very important that tartar be scaled off but not during the acute phase of the infection.

Some acute cases of gingivitis go on to become chronic. Pyorrhea alveolaris may represent the end stage in this process in some cases. All cases of pyorrhea show large numbers of Vincent's organisms (4). Severe pyorrhea calls for extraction of the teeth. One of the most frequent notations made on physical examinations of adults on hospital wards is "pyorrhea alveolaris," yet doctors often ignore the ill effects

pyorrhea may have on the general health, while searching hard for more obscure foci of infection.

Treatment

When the gums and teeth are in a healthy state tonsillar infections with Vincent's organisms become rare. Birkett (18), relates that, "Vincent's angina was frequently met with amongst the troops during the World War; but in those units which had a dental surgeon attached, the condition was seldom seen due to the attention given to mouth conditions."

Physicians use and recommend many and diverse therapeutic agents in Vincent's angina. Local applications are probably effective enough in mild cases. Systemic treatment is indicated in severe, acute infections in mouth and throat.

Vincent's infections received a lot of attention during the first World War and vitamin C was thought to be very important in prevention and treatment. Last summer, J. D. King (19), in London, reported prompt cure all of a small group of cases of trench mouth with the daily administration of 250 mgm. of nicotinic acid. Previous work (20) in this country had shown that nicotinic acid was effective in clearing up the stomatitis with secondary fuso-spirochetal infection of pellagra. King's cases, however, were not pellagras. No further reports on this treatment have appeared as far as I can find out, but it may prove to be helpful in combating acute and chronic Vincent's infections. I have tried nicotinamide in a few cases and thought it was definitely beneficial.

There are not, as far as I know, any particularly favorable reports in the literature on the use of sulfanilamide, sulfapyradine, or sulfathiazole, in Vincent's infections (21). However, Dr. Smith tells me (22) that he has used these drugs in some cases of pulmonary fuso-spirochetosis, as a supplement to neoarsphenamine, "apparently with some definite results." I have used sulfathiazole in two cases and observed definite benefit, except that one of these cases of genital fuso-spirochetosis developed lumbar pain suggesting deposition of the drug in the kidneys.

Neoarsphenamine and other arsenicals given intravenously have been effectively used in many cases. Less drastic medication is, I believe, preferable. Three years ago I began using bismuth preparations intramuscularly in typical Vincent's angina and in case of acute tonsillitis in which large numbers of Vincent's organisms were found

in the muco-purulent material aspirated from the tonsils. The results in these cases of acute tonsillitis were amazingly beneficial. Usually one injection was sufficient. Marked improvement in the signs and symptoms was observed in 6-18 hours. A study of the literature revealed that certain South American authors (23) had been using bismuth injections extensively for several years, not only for Vincent's angina, but for acute "non-specific" tonsillitis as well. They regard the streptococcus as the main etiological agent in acute tonsillitis as do authors in this country. They recommend bismuth as the treatment of choice in tonsillitis and feel that it is more efficient and less toxic than sulfanilamide in these cases (24), but no comparative series of cases has been reported. They report that bismuth is not at all effective in pneumococcal nasopharyngeal infections, such as have been prevalent (1) this winter. There have been a number of enthusiastic reports in foreign journals (25) confirming the effectiveness of bismuth in tonsillitis. Monteiro is to have an article in a forthcoming issue of the Archives of Otolaryngology. I am submitting an article with a number of case reports, for publication in the same journal.

Many physicians in this country are using bismuth injections for Vincent's angina, but there are not many reports in the literature. As long ago as in 1931 Harrell (26), after a review of the literature on Vincent's angina, stated that "the use of bismuth preparations constitutes the best form of treatment, for they are less toxic, more powerful, and more economical." The water soluble preparations are usually used with the idea that they will be more readily effective, and three or more injections are given. I believe the sub-salicylate-in-oil is quite effective enough in acute tonsillitis and Vincent's angina and one injection is usually sufficient. Moreover, this preparation rarely causes pain afterward while soluble preparations frequently do cause pain. The injection is given intragluteally with all proper precautions to avoid oil embolism. The adult dose of the standard sub-salicylate-in-oil is 1cc. (containing .13 gm of the drug, the equivalent of 76 mgm. metallic Bismuth.) Infants may be given .1cc or .2cc, and older children in proportion to weight. Moore (27) recommends 2 mgm. of the salicylate per kilogram body weight for treatment of congenital luetics. Monteiro uses somewhat similar doses of insoluble bismuth preparations (in acute tonsillitis), but prefers soluble preparations, which he uses in much smaller doses

(such as 1-2 mgm. for infants, and 10 mgm. for children of 15 years).

Bismuth is noted for its low toxicity. The commonest toxic manifestation is stomatitis which is marked by the presence of large numbers of Vincent's organisms. This toxic manifestation comes, of course, only after prolonged administration of large doses of the drug for syphilis. The explanation of the fuso-spirochetal infection here is a breaking down of tissue resistance from accumulation of the drug in the tissues, whereas smaller amounts of the drug in the same tissues are bactericidal without harming the tissues. Skin eruptions occur, though rarely, and contraindicate further use of the drug (27). I have seen skin eruptions in two infants, possibly due to use of unusually large doses of bismuth salts. Bismuth is nephrotoxic when large amounts are administered. I have seen one child, not my case, with temporary anuria following the administration of something like 3 ampules of a soluble bismuth preparation (containing 76 mgm. metallic bismuth per ampule) in three days.

One deterrent to the use of bismuth is the discomfort of an injection. Now that we have a bismuth preparation for oral use (Sobisminol), we may be able to avoid injections in many cases, but there are as yet no reports on the use of Sobisminol in Vincent's infections.

Summary and Conclusions

An outline is presented of the natural history of oral and tonsillar Vincent's infections of endogenous origin as they may effect children, young people and adults. Some of the concepts included in this description are subject to controversy and may be erroneous.

There are reasons for suspecting that Vincent's organisms are more active in tonsillitis, with or without ulceration and membrane formation, than has generally been thought. Bacteriological smears made from material aspirated from diseased tonsils often show spirochetes and fusiform bacilli in large numbers, while smears from swabs of the same tonsils show insignificant numbers of these organisms.

Bismuth therapy is recommended for acute tonsillitis when there is evidence of active fuso-spirochetal infection as associated gingivitis and, or, suggestive bacteriological findings as well as for typical Vincent's angina. Mention is made of the extensive use of bismuth in South America in the treatment of acute "non-specific" tonsillitis as well as in Vincent's angina.

I have broached the hypothesis, based on clinical observation along with some laboratory evidence, that Vincent's infections may be causative in many cases of chronic tonsillitis. If this theory is true, it may point the way for management of gum and throat infections in children in such manner as to avoid progressive tonsillar inflammation and hypertrophy, and constitute an addition to the armamentarium of preventive medicine.

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RESOLUTION

Whereas, the grim Messenger of Death has again entered within our gates, and this time claimed as its victim one of our leading members, Dr. J. C. Hughes, and whereas our hearts are filled with sorrow as we pen these few lines of biography.

Doctor Hughes was born and reared in Arkansas and graduated from the Memphis Hospital Medical College. He did post-graduate work in the New York and at Tulane University.

In addition to a wide general practice, he did quite a great deal of surgery, and specialized in urology, proctology and x-ray. At one time or another he filled every office of the Society and did it with credit to himself and to the satisfaction of the Society. At the time of his death he was our delegate to the Arkansas Medical Society.

Therefore, be it resolved by the Lawrence County Medical Society, that we realize that in the passing of Doctor Hughes we sustain a loss that will be hard to replace; that organized medicine has lost a champion that would stand up for its rights at any time or place; that the family has lost an indulgent husband and father; the community has lost one of its leading physicians and benefactors.

Be it further resolved that we extend sympathy and condolence to the bereaved family; that we present them with a copy of these resolutions as a token of our appreciation of Doctor Hughes; and that we spread a copy on the minutes of the Society for a permanent record.

Done by order of the Society this June 10, 1941.

Committee: Chas. D. Tibbles, Chairman
W. W. Hatcher
A. G. Henderson

PNEUMOCOCCIC MENINGITIS WITH RECOVERY

S. J. WOLFERMANN, M. D.,

and

L. A. WHITTAKER, M. D.

Fort Smith

Mrs. D. S., white female, age 46, entered St. Edward's Mercy Hospital January 19, 1941, about 6 p.m., with the complaint of severe, uncontrollable occipital headache, associated with nausea and vomiting of twenty-seven hours duration. This headache had not responded to two hypodermics by her family physician at home. Twenty-four hours previous to coming into the hospital she had consulted Dr. E. C. Moulton, otolaryngologist, on account of an earache. Dr. Moulton reported that the drum was slightly reddened and inasmuch as she lived fifty miles away from Fort Smith, felt that it would be better to open it on account of the slight bulging and redness, rather than let her return home without observation. Consequently, he carefully opened the drum membrane with drainage of a small amount of bloody serum. There was no pus, and when the patient entered the hospital examination of the drum showed just the small amount of clotted blood. The patient stated that she had had some discomfort in this ear for about two days previous. About ten days before admission she had a mild group of symptoms associated with her bladder which her family physician had diagnosed as cystitis, and which cleared up under local irrigations. Otherwise she had had no recent illness. Her past history is of no consequence in the present illness.

Physical examination revealed a white, well-nourished female apparently acutely ill, face flushed, rather restless, conscious, complaining of severe headache and nausea. Temperature was 100.2; pulse 76; respiration 32. There was only a slight rigidity of the neck; some very slight tenderness over the tip of the left mastoid, which follows down the left sternomastoid muscle. She had tenderness all over the occiput but there was no tenderness over the sinuses. Pupils were equal; regular; reacted to light and accommodation and there was no divergence. The chest showed no abnormal findings. The heart was negative to percussion and auscultation. Blood pressure was 150/80. The abdomen was negative for any masses, rigidity or tenderness and there was a well-healed appendectomy scar. The vaginal examination was not made. Reflexes showed a

slight decrease of the right patellar, with the left patellar very active, although there was no patellar or ankle clonus. There was a slight suggestion of a Kernig on the right side but all foot signs were normal. There were no abnormal reflexes and the abdominals were unchanged.

The laboratory findings were as follows:

Red blood cells	4,480,000	Stabs	15
White blood cells	23,000	Segmented	75
Hemoglobin	13 gms.	Lymphocytes	10

Urinalysis report:

Albumen	1 plus	White cells	8-10
		Red cells	2-4

Because of the uncontrollable headache, and the history of an opened ear, a spinal puncture was done with the following findings: The fluid was quite turbid; white cell count was 2,664, with polymorphonuclear cells predominating; gram positive diplococcus, resembling a pneumococcus was present, and a capsule was demonstrated.

Therapy was begun about two hours after entrance. Two grams of sulfapyradine were immediately given orally and four grams of sodium sulfapyradine monohydrate was given intravenously. One gram of sulfapyradine was then given every four hours orally. Within four hours the patient became so restless as to require restraint and at the same time there was complete loss of consciousness. A nasal tube was passed, at which time the sulfapyradine dosage was increased to one and one-half grams every four hours through the nasal tube. The patient developed an ileus and the blood level for sulfapyradine remained at 7 mgm. per 100 cc. It was our opinion that due to the ileus and the distention the sulfapyradine was not being absorbed from the gastrointestinal tract. Therefore, in eight hours four more grams of the sodium monohydrate was given intravenously and in eight hours another four grams was given. By that time we were able to get a bowel movement by enema and prostigmine and the blood level sulfapyradine immediately jumped to 15.97 per 100 cc. This retention of the drug in the intestinal circulation and sudden absorption with the relief of ileus we believe analogous to the toxin absorption and release to the general circulation as seen in the sudden release of intestinal obstruction.

Beginning the third hospital day antipneumococcic serum combined, types one and two, 20,000 units of each, were given intravenously, repeated in eighteen hours, and again in forty hours for a total of 60,000 units of each type one and type two. The blood culture and the culture

from the spinal fluid were both positive for type one pneumococci, but the mixed serum was the only one available. A total of 89 grams sulfapyradine was given over a period of sixteen days.

The patient remained unconscious and was extremely restless for about seven days and was kept constantly in restraint. The barbiturates and paraldehyde even in large doses had very little sedative effect. In fact, they seemed to excite the patient, so morphine sulphate $\frac{1}{4}$ grain had to be employed to take care of the restlessness. On the sixth day the patient seemed worse and she was given oxygen by Boothby mask and on account of an apparent heart failure was given coramine hypodermically with satisfactory response. The attack did not last over three hours. On the seventh day the patient aroused and was able to take some nourishment by mouth, so the nasal tube was removed and the sulfapyradine continued orally. After the seventh day the patient made steady improvement to recovery.

Spinal punctures were done daily for five days. A pressure between 300 and 400 mm. of water was recorded each time and enough fluid was withdrawn, usually between 30 and 40 cc, to lower the pressure to about 110 mm. The last spinal puncture was done on the twelfth day and revealed a pressure of 190 mm. The fluid was clear to the naked eye and contained 26 white blood cells with a differential count of 14 polymorphonuclear cell and 12 lymphocytes. Culture of this fluid was negative for pneumococci.

The manufacturers of sulfapyradine state in their literature that the spinal fluid concentration of the drug approximates the blood concentration. Throughout this illness the spinal fluid concentrations were almost uniformly $\frac{1}{3}$ the blood concentrations.

During the course of treatment the patient developed a mild anemia; the red blood cells dropping from 4,480,000 on entrance to 3,600,000. The only urinary changes were one plus granular casts with red blood cells 1-2, white blood cells 6-8 per low power field, which cleared up when the sulfapyradine was stopped. The highest oral temperature was 100.4, which dropped to normal in two days and remained there until discharge. The pulse ranged between 70 and 120. The respiration showed little change.

The patient was discharged ambulatory on the twenty-third hospital day with no sequelae and no evidence of any permanent damage.

Patient returned to the office on March 5th for check examination and no abnormalities could be found.

A second patient, Mr. P. S., a white male, age 19, entered St. Edwards Hospital on April 15, 1941, giving a history of having a severe headache, pain and stiffness in his neck of about twenty-four hours duration. For the past three months he had had several attacks of pain in his ears, the left being more frequently involved, and also draining pus from this ear. The ears were not draining on admission.

Physical examination revealed a white, well-nourished, well-developed male, appearing apathetic, holding neck very stiff, unable to move head without producing severe pain in neck. Eyes: Pupils regular and react to light and accommodation. Chest negative; heart negative; abdomen negative; no pathological reflexes present, except bilateral kernig.

Laboratory:

Blood: White blood cells 22,200; red blood cells 4,560,000; hemoglobin 12.5 gms.

Differential: Myelocytes 5; stabs 8; segmented 81; lymphocytes 6. Spinal fluid: Cloudy; white cells 9,225; polymorphonuclear 99; lymphocytes 1.

Gram positive capsulated diplococci, type X.

Urine: Albumen 4 plus; white cells 3-4; red cells 1-2; sugar negative; casts negative.

Four hours after admission 4 gms. of sodium sulfapyridine monohydrate was given intravenously and a similar amount given intravenously at four-hour intervals for five doses. At the end of this time a stomach tube was dropped and sulfapyridine gms. $1\frac{1}{2}$ given every four hours. The blood sulfapyridine level after 8 gms. had been given intravenously was 7.97 mg. per 100 cc. blood. The blood level rapidly rose to 19.97 mg. The spinal fluid sulfapyridine level more closely paralleled that of the blood usually being from 1-4 mg. lower.

Within four hours after admission, the patient became unconscious and extremely restless, so that restraints were necessary to keep him in bed. Devinal sodium, empirin compound with codine and ice caps to head seemed to control his restlessness fairly well. On the fourth hospital day the patient developed a mild distention which was relieved by prostigmine and enemata. On the fifth hospital day the patient regained consciousness, was quiet and able to take nourishment by mouth. Sulfapyridine gms. $1\frac{1}{2}$ every four hours was continued to sixth hospital day, then reduced to gms. 1 every four hours for seven days longer, a total of $113\frac{1}{2}$ gms. sulfapyridine given over a two weeks' period.

Spinal punctures done at daily intervals revealed a pressure of 320 m.m. water on first day with cloudy turbid fluid. The pressure gradually fell and fluid cleared so that on tenth hospital day the spinal fluid findings were normal.

The temperature ranged from 90-103°F and was very irregular, returning to normal on the sixth hospital day. Pulse ranged from 70-140.

This second case ran a consistently higher sulfapyridine level in the spinal fluid than in Case No. 1, the spinal fluid level being about 1-4 mg. less than that of the blood, while Case No. 1 had a spinal fluid level only about $\frac{1}{3}$ that of the blood. Both developed an ileus with distention after tube feedings, which were controlled with enemata and prostigmine.

SUMMARY: We are reporting these for acute fulminating cases of type I pneumococci meningitis proved by culture of the blood stream and of the spinal fluid, which, with prompt treatment with sulfapyridine combined with anti-pneumococcic serum, progressed to complete recoveries with no sequelae.

RESOLUTION

Dr. William J. Robinson was born at Sylamore, Arkansas. He lived all of his life in this northern part of Arkansas. He graduated from the Memphis Hospital Medical College in 1897 and practiced medicine in Arkansas for more than forty years, the greater part of his life being spent at Portia. He did a wide practice and was loved and respected by thousands for whom and with whom he had labored during the years.

He was a member of Lawrence County Medical Society for many years and on March, 1938, was elected an honorary member of the Society.

But there comes an end to every man's career; the last word that can be written in any man's biography is that "he died." So death came to Doctor Robinson on March 11, 1941.

Whereas, we realize in the passing of Dr. W. J. Robinson that the family has lost a loving husband and father, the community has lost a benefactor, and the Lawrence County Medical Society has lost a good member, therefore

BE IT RESOLVED by the Lawrence County Medical Society that we extend sympathy and condolence to the bereaved family, that we cherish his memory in the Society as a pleasant co-worker and a congenial member among us.

Be it further resolved that a copy of these resolutions be presented to the family as a token of our appreciation of Doctor Robinson, and a copy be spread on our minutes for permanent record.

Done by the order of the Society this the 10th day of June, 1941.

Committee: Chas. D. Tibbles, Chairman
W. W. Hatcher
A. G. Henderson

HISTORY OF THE ARKANSAS MEDICAL SOCIETY

Compiled by the Committee

Frank Vinsonhaler, Chairman, Little Rock; M. L. Norwood, Lockesburg; E. F. Ellis, Fayetteville; Robert Caldwell, Little Rock; W. T. Wootton, Hot Springs National Park; H. Moulton, Fort Smith; J. M. Lemons, Pine Bluff; E. E. Barlow, Dermott; D. A. Rhinehart, Little Rock; W. H. Mock, Prairie Grove; L. J. Kosminsky, Texarkana; F. O. Mahony, El Dorado; M. E. McCaskill, Little Rock; Geo. B. Fletcher, Hot Springs National Park; O. J. T. Johnston, Batesville; S. J. Wolfermann, Fort Smith; A. S. Buchanan, and H. T. Smith, McGehee.

UNIVERSITY OF ARKANSAS SCHOOL OF MEDICINE

The history of the School of Medicine was very much like that of all other schools in the United States at that time. The course was limited to two years and the students attended all the lectures. Freshmen, sophomores, juniors and seniors were amalgamated into one class. There was an equal interest in anatomy and obstetrics, and special branches, such as the eye and ear. Neurology and gynecology were equally interesting to all the students. Then, as now, the training of the medical student was not what one would call ideal. There was very little clinical instruction, the clinic being conducted by Dr. Bentley, as a rule to fill prescriptions, observe the progresses of treatment in the different cases, and was faithful to every detail.

The coming of Dr. T. E. Murrell brought a new interest to medical instruction. He had been trained by Dr. Chisolm in Baltimore, who in his day, was perhaps the leading ophthalmologist. Dr. Murrell performed cataract operations in the presence of students, removed tonsils and adenoids and was a very capable man.

Dr. James H. Lenow became professor of urology and remained so until the end of his services with the School of Medicine.

Dr. L. R. Stark introduced the teaching of gynecology as a separate subject.

The school prospered and joined the Association of American Medical Colleges and soon its student body reached two hundred. It was the

custom in those days for physicians to spend one year in medical school, retire to their country practices, become active and often successful practitioners, and then return in half a dozen years to take the final year in medicine and receive their diplomas. It has become now a part of modern medicine in a few institutions to imitate this plan to a certain degree, i.e., to divide the senior class now into sections and have them actually practice medicine in the homes of charity patients in the town in which the school is located. This, while stressing a certain method of clinical teaching, is something of an approach to the old, old method.

I recall lecturing to men in the School of Medicine who were fifty and sixty years of age and who had been engaged in actual practice for more than twenty years. Of course, with the coming of medical laws, the institution of state board of examiners changed all this, as did also the advancement in medical school teaching.

Later on the course was lengthened to three years and finally to four, where it has remained ever since.

The question of medical teaching then was chiefly one of lectures. Each teacher faithfully appeared before the class at the time assigned to him by the curriculum committee and delivered an hour's lecture. The noon hour was frequently devoted to clinics, some of which were interesting but none of which were scientific in the modern sense. There was very little laboratory work. When I joined the School of Medicine in 1893 there was but one oil immersion microscope in use. All of this came afterwards, chiefly under the tutelage and instruction of Dr. S. H. Kempner, who first taught laboratory methods in the school.

In 1891 the school had prospered to the degree that it was compelled to erect a modern medical school building. This was done at the corner of Second and Sherman Streets, where the old building still stands. I think the school was moved to this new building in 1891. It was two stories, part of the upper floor being devoted to a dissecting room, where dissections were under the direction of Dr. L. P. Gibson, demonstrator in anatomy and a very excellent teacher. Dr. James A. Dibrell was professor of anatomy and dean, succeeding Dr. Hooper in 1886, Dr. Hooper having served seven years. Dr. Dibrell served as professor of anatomy during all that time and when he became dean in 1886, he

EDITORIAL NOTE: This is the sixth installment of the preliminary draft of a History of the Arkansas Medical Society. Subsequent issues will contain additional sections of the history as now prepared. The Committee will welcome suggestions or additions which the membership shall care to present.

served in that capacity until his death in 1905. I doubt if the subject of anatomy is any better taught now than it was under Dr. Dibrell and Dr. Gibson.

The students came to test the capacity of the institution, and I have often seen them unable to secure seats using the steps in the amphitheatre for seating purposes.

The school prospered. The teachers were paid no salaries, except such as arose from the tuition fees of the students, it being a joint stock affair. Dividends were declared occasionally and the hearts of the visiting teachers were gladdened by some financial remuneration.

In 1893 upon my becoming connected with the school, beginning with the second semester, I found all of the old founders of the school teaching. I knew them all. In addition, Dr. Edwin Dibrell was professor of physiology, having succeeded Dr. Southall, who had moved up to the practice of medicine. Dr. Dibrell afterwards succeeded Dr. Southall in the practice of medicine and was one of the most popular teachers of that branch in the history of the school. Unhappily, he died in his prime, a great loss to teaching methods.

After Dr. J. A. Dibrell's death in 1905, Dr. Edwin R. Bentley served for two years as dean, continuing his activity as head of the clinic and as head of the department of surgery. I have already discussed Dr. Bentley's career and now I want to take occasion to pay to him this tribute: He was one of the most unselfish and devoted friends of the medical school. There was no work too hard, no difficulty that presented itself that to his mind did not offer some means of solution. He practically died in the harness, keeping up his practice until the very end.

He was succeeded by his son, Dr. Carl Bentley, in surgery, who was a graduate of this institution and also of Bellevue Hospital Medical College. Dr. Carl Bentley, in a great measure, took his father's place. He resembled him in many ways, in his devotion to the school, and in his care of charity cases.

Dr. James H. Lenow succeeded Dr. Bentley as dean in 1907 and served five years, being succeeded then by Dr. Morgan Smith. Dr. Lenow retained his position as professor of urology. He was a native of Memphis, Tennessee, and a graduate of Jefferson Medical College.

Dr. Morgan Smith was an interesting character. He was a graduate of the School of Medicine of

the University of Arkansas in one of its early classes, afterwards doing postgraduate work at Tulane University. He located in Union County near El Dorado and afterwards in El Dorado. He came to Little Rock, I think, about 1905, specializing in pediatrics, and for several years was in charge of the Rockefeller campaign against hookworm in Arkansas, doing very excellent work as an administrative officer and as a physician.

Dr. Smith will be remembered by the profession with much affection. He was an attractive public speaker, an excellent physician and a good administrative officer as dean of the school of medicine. No one could have shown more affectionate interest in the school of medicine than Dr. Smith nor have offered to do more in a constructive way. He afterwards served in the Legislature for several terms.

He was dean at the time that the survey of medical schools was made by Dr. Flexner, who visited Little Rock and succeeded in consolidating the University of Arkansas School of Medicine and the College of Physicians and Surgeons, the dean of which was Dr. Joseph P. Runyan. This survey of Dr. Flexner's cut the number of medical schools in the United States practically in half, getting rid of a number of weak institutions and consolidating others, improving our medical teaching as probably no other procedure has ever done.

For two years the school of medicine gave only the freshman and sophomore years, the junior and senior years being given at Tulane University. Then under the reorganization effected by Dr. Smith, the school again became a four-year institution and has remained so ever since.

Dr. Smith succeeded in getting an appropriation of \$500,000.00 for our hospital, this amount to be appropriated at each session of the Legislature in the sum of \$100,000.00. Unfortunately, politics too powerful for Dr. Smith took the money appropriated for the school of medicine and used it to pull the State Penitentiary out of debt so that his hopes and efforts came to naught.

Dr. Smith's connections with the school of medicine will be remembered by his many friends and students with sincere affection. He succeeded in making the first two years of the school something of what medical teaching required it to be, developing the laboratories, putting in equipment, and during his administra-

tion the Isaac Folsom bequest of \$20,000.00 was spent to erect a new clinical building to house the clinic which had grown to such proportions that it was impossible to handle in the old institution.

In 1911, acting upon the advice of Dr. Flexner, the faculty of the school of medicine, by an act of the Legislature, presented the school to the State of Arkansas exacting nothing in return, making a free gift of all the equity of the founders and owners of the medical school. In return for this in the law accepting this gift these words occur, "The State of Arkansas hereby pledges its faith and honor to forever maintain a School of Medicine of the University of Arkansas as an 'A' grade medical school," a guarantee that insured the permanency of the school of medicine. From that time on the school of medicine was administered and controlled by the president of the trustees of the University of Arkansas and the school became in fact as well as in name an integral part of the university and has remained so ever since.

In 1927 Dr. Morgan Smith resigned as dean and was succeeded by Dr. Frank Vinsonhaler, who had served as professor of ophthalmology since 1893.

For some years the first two years of the medical school were given in the Old State House at 300 West Markham Street. This beautiful old building had been abandoned after the completion of the new capitol. Dr. Smith had succeeded in getting it for the use of the medical school. The inside of the building had been so arranged as to house all the departments of the freshman and sophomore years. While the building was beautiful, it was unfitted for medical school purposes, poorly ventilated, and insufficiently heated during the cold months of winter. Yet it served the purpose and housed the medical school until the completion of the new building.

The school is now housed, conveniently and comfortably situated. This new building was the result of long continued efforts on the part of those interested in the success of the school. The result was that a loan made by the Public Works Administration of \$500,000.00 was successfully consummated and a telegram from Senator Joseph T. Robinson on January 4, 1934, announced that the Public Works Administration had approved our loan and that it was now possible to realize the dreams of those who had longed for

years for an opportunity to secure a building with equipment commensurate with our needs.

Mr. Ray Burks was employed as architect for the new building, a very happy selection. The results of his work are shown in the beautiful building, in the arrangement of the lecture rooms and laboratories, and in the convenience that marks a modern medical school. The site selected for the school was the ground on which the old home of Dr. Bentley stood. This home, which had formerly been one of the most attractive in Little Rock, had been abandoned and remained empty after the death of Dr. Bentley. It was razed to the ground and preparations were made for the erection of the new building. The first shovel full of earth was thrown by the Dean on July 16, 1934, in the presence of imposing ceremonies.

The corner stone of the building was laid by the Grand Lodge of Free and Accepted Masons of the State of Arkansas. Mr. W. A. Thomas, Grand Master of the Grand Lodge, presided over the ceremonies, assisted by Mr. J. B. Bunn, Deputy Grand Master; Earl R. Bogan, and Eugene R. Bly. There were present on that occasion the Honorable Joseph T. Robinson, who made the principal address, Governor Futrell and ex-Governor Donaghey, Congressman D. D. Terry and Mr. Hayley M. Bennett, member of the Public Works Administration Board.

Senator Robinson mentioned the World War in declaring that "too much has been given recently to destruction" and added that "those who look to the future would do well to employ their energies to building." He praised the work of the school and admonished the people to "build your own schools and colleges, patronize them and support them financially to the extent of your ability and in that way, Arkansas will be made great."

On September 11, 1935, the architect, Mr. Ray Burks, pronounced the building complete and turned over the keys to the dean. That auspicious occasion, like many others, was recorded in photography, a picture showing Dr. Vinsonhaler firmly grasping the keys as though, as Mr. Burks said, he was afraid of losing them and not getting them back.

School instruction began October 2, 1935, and continued unembarrassed and untroubled by all the old difficulties that confronted us in the building, from which we had moved.

On March 23, 1936, the building was formally dedicated, the ceremonies being held in the amphitheatre at 1:30 in the afternoon. Governor Futrell delivered the principal address. In the presence of all there was evident Dr. Thomas M. Pinson, of Kerrville, Texas, who was the first graduate of the school of medicine, accompanied by his daughter, Mrs. Sam Thompson. In the afternoon and evening there was open house and the building was filled in the different departments by visitors who were anxious to see the new equipment.

One of the interesting features of the new building has been the part dedicated to the library, which contains at the present time 11,650 volumes, 216 current journals, bound journals, catalog of the surgeon general's office and the index medicus. On the walls of the reading room are to be seen oil paintings of all the deans of the school with the exception of Dr. Lenow, which it is hoped will be supplied sometime in the future, also the old editions of medical volumes, some of them priceless. In addition, one finds on the wall the diploma and an interne's certificate of Dr. Matthew Cunningham. The steady growth of the library under the supervision of Mrs. Elizabeth Richardson, has been one of the heartening features of the school's progress.

After many financial struggles and much hardship the school has recently by act of the last Legislature, been given sufficient revenue to satisfy the requirements of the Council on Medical Education. It would seem that our institution has at last been placed upon a solid foundation where we may rest in the belief that its progress will ever onward and upward, that it will continue as it has done in the past its work in educating young men in the practice of medicine, who return to their several homes throughout the state and become a source of usefulness and strength to the communities in which they live.

In June, 1938, the present dean tendered his resignation to the board of trustees. This resignation was not accepted until a special meeting of the board in December, 1938, and then with the provision that Dr. Vinsonhaler was to continue to serve as dean until his successor was selected.

Dr. Vinsonhaler's successor as Dean of the School of Medicine was

DR. STUART PEYTON CROMER

A native of Springfield, Ohio, with the following Degrees: A. B., Wittenberg College, 1916; M. A., Ohio State University, 1927; Ph. D.,

Northwestern University, 1933; and M. D., Northwestern University, 1935.

He taught school for fifteen years and was connected with faculties of Northwestern University Medical School and Baylor University College of Medicine. He served as superintendent of the Illinois Research and Educational Hospital, Chicago, and hospital inspector for the Council on Medical Education and Hospitals of the American Medical Association.

He assumed the duties of Dean of the University of Arkansas School of Medicine, July 1, 1939.

In 1935 the Isaac Folsom Clinic gave fifty-seven thousand treatments. This does not mean there were fifty-seven thousand people treated, some of them came for some length of time, but simply specifies the amount of work done at the clinic. Objections were raised by the profession that people were being treated in the clinic who could afford to pay. The cost of the clinic became such as to endanger the financial standing of the school. The instruction of the president and the board of trustees of the university was that the clinic should be cut down in order that it could be successfully maintained and that if it continued it would bankrupt the school. This was done by a new arrangement that every patient treated in the clinic must come with a doctor's certificate that he was entitled to free treatment. This cut down the number of patients markedly. Still the clinic runs between two and three hundred patients daily and has become a great factor in the care of the indigent sick in Arkansas. It occupies the whole of the first floor of the building.

CORRESPONDENCE

North Little Rock, Arkansas
May 6, 1941

To the Secretary:

The Arkansas Medical Society check for one hundred dollars for our student loan fund reached me today and I want to extend my personal as well as the thanks of the Auxiliary for this handsome gift. If the Society is interested enough to help us with our fund, I should like for them to have a report of what our fund has done at the next annual meeting.

With deep gratitude,

Yours sincerely,

Mrs. Chas. E. Oates, Chairman,
Ilse F. Oates Student Loan Fund.

THE JOURNAL

OF THE

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EDITORIALS

THE NATIONAL PHYSICIANS COMMITTEE FOR THE EXTENSION OF MEDICAL SERVICE

Every physician in the United States has received recently the small booklet from the above organization that carries good gospel for the Two Essentials for American Medicine. It is a strong document. You know this if you have read it.

The aggressive program of this National Physicians Committee has been obliged to mark time for a period because of the Washington Indictment that failed to find criminals, conspirators or any personal responsibility for an indefinite and intangible restraint by our national organization.

This complete airing of the arguments and testimony at the Washington trial serves to show the alignment of all the personalities and of the line of thought and philosophy of our present government and American Medicine as represented by the AMA. It serves to indicate that a Code of Conduct should be provided for our Code of Ethics.

The charge to the jury by Judge Proctor can serve as a model document from which to erect

such a Code of Conduct. This has been printed in full, along with all the testimony, in recent issues of the Journal of the AMA. There was only approval for the standards that organized medicine had erected for medical practice, medical education, hospital standardization and the guidance of the changing economics of medicine practice. There was approval of the justice of demanding adherence of all those who joined the AMA to the ethics and standards imposed through our autonomous and democratic organization. The verdict depended entirely upon whether there had been conspiracy to prevent other than standardized methods of medical practice to develop. This verdict must stand the scrutiny of higher courts and from such decisions or reviews will develop a Code of Conduct as well as any changes in our Code of Ethics. Inasmuch as ethics are fundamental conceptions of reasonable human and professional relationships, our government can only hope to inflict certain political and ephemeral supervision.

The second half of the National Physicians Committee's booklet discusses this problem of maximum distribution of effective medical services. It would actually seem that the profession in various sectors was conspiring to provide innumerable new forms of medical practice. All of these experiments are necessary and out of the many we will find certain programs that will be applicable to the character of population and the local wants and needs that vary so within this large country.

The National Physicians Committee is your organization and it is working to secure and provide the answers that the shifting economics and political activity require. The AMA cannot do the job that must be done by this organization. But the AMA does need the help of this outfit to tell the people what is best for their best interests of health. We know that the AMA has and is doing a good job. The people must know this too. The AMA cannot finance this committee. We must!—E. H. Skinner, M. D., in Kansas City Medical Journal, May, 1941.

TUBERCULOSIS POSTGRADUATE STUDY

Members of the Society interested in the diagnosis and treatment of tuberculosis are advised that the entire facilities of the State Sanatorium are available for periods of study in all procedures connected with the diagnosis and treatment of the disease. Dr. J. D. Riley, Superin-

tendent, has advised The Journal that members are welcome and that quarters are available for those who wish to stay while they observe the methods in use at the sanatorium. It is the desire of the staff of State Sanatorium to offer their facilities to Arkansas physicians in order that there may be a wider dissemination of knowledge of modern diagnosis and treatment in tuberculosis. The weekly schedule of medical activities at the sanatorium follows

Monday A.M.: Pneumothorax, and surgery (Intra-pleural pneumolysis, phrenic-exeresis, etc.)

Tuesday A.M.: Pneumothorax.

Tuesday, 2 P.M.: Preliminary staff.

Wednesday, 9 A.M.: Regular staff.

Wednesday, 6:15 P.M.: Surgical staff.

Thursday A.M.: Surgery.

Friday A.M.: Pneumothorax.

Saturday A.M.: Surgery (Intra-pleural pneumolysis, phrenic-exeresis, etc.)

In addition to the above schedule, the different physicians take care of the routine ward work and examination of inside and outside patients, coordinating this work with the schedule outlined above.

EDITORIAL COMMENT

CIVIL SERVICE PHYSICAL EXAMINATIONS

The attention of all members is directed to a ruling of the United States Civil Service Commission whereby, for the period of the emergency, the Commission is now accepting medical certificates (report of physical examination) executed by any duly licensed doctor of medicine in connection with the examination of applicants or appointees to the classified civil service. This is in lieu of the former requirement that such certificates could only be executed by physicians in the Federal service. It is suggested that interested physicians advise local civil service authorities of this change in regulations.

"CHEST X-RAY INTERPRETATION"

The National Tuberculosis Association has made available a handy booklet on X-ray interpretation in chest diseases which will be of interest to those of the members who are engaged in X-ray work. Copies of the booklet may be obtained gratis from the Arkansas Tuberculosis Association, 444 Donaghey Building, Little Rock.

PROCEEDINGS OF SOCIETIES

The Southeast Arkansas Medical Society met at Hamburg May 19th for the following program: "Coronary Occlusion," M. W. Hunter; "Appendiceal Abscess," J. Q. Graves; "Analysis of the Symptoms of Early Tuberculosis," R. H. Frost, all of Monroe, Louisiana, and "Review of 1941 Annual Session of Arkansas Medical Society," H. T. Smith, McGehee, and "Review of 1941 Annual Session of the Louisiana State Medical Society," J. Q. Graves, Monroe.

S. W. Douglas, Reporter.

The First Councilor District Medical Society met with J. H. McCurry at Cash May 14th for the following program: Address of Welcome, J. H. McCurry; Response, W. W. Verser, Harrisburg; "Nocturnal Enuresis," J. C. Land, Walnut Ridge; "Hypertension," Ira W. Ellis, Monette; "Common Gynecologic Problems," E. R. Barrett, Jonesboro; "Monocytic Leukemia," A. C. Model-evsky, Jonesboro, and "Symptoms, Diagnosis and Treatment of Hypertrophy of the Prostate," I. G. Duncan, Memphis. J. H. McCurry was re-elected secretary and Jonesboro chosen for the fall meeting place.

The annual banquet session of the Crawford County Medical Society was held at Alma May 21st.

The Fifth Councilor District Medical Society met in dinner session at Magnolia May 13th for the following program: "Serum Treatment of Pneumococcus Pneumonias," Ben R. Buford, Dallas, and "Urologic Problems in General Practice," Jo C. Alexander, Dallas.

The Mississippi County Medical Society was addressed June 6th by Lyle Motley, Memphis, "Indigestion," and Thos. D. Moore, Memphis, "Ureteral Kinks and Strictures."

F. D. Smith, Secretary.

The Benton County Medical Society met in dinner session at Gravette June 12th for the following program: "Podalic Version and Pituitrin," J. T. Powell. The annual picnic session of the Benton and Washington county societies will be held at Bentonville July 10th.

M. W. Chastain, Secretary.

The Ninth Councilor District Medical Society met at Harrison June 4th a luncheon session with the following program "Tularemia," A. M. Washburn, Little Rock; "Fungi in Eczematous Dermatitis of the Hands," L. F. Heimbarger, Springfield, Missouri; "Diseases of the Prostate," W. S. Sewell, Springfield, Missouri; "Urological Problems that Daily Confront the Physician," Chas. Paddock, Fayetteville, and "Trachoma in Arkansas," L. K. Hundley, Harrison.

A joint dinner session of the Sebastian County Medical Society and the Muskogee (Oklahoma) County Medical Society June 10th at Fort Smith was addressed by H. V. Ballantine, "Some Anomalies of the Newborn" and F. G. Dorwart, "Massive Collapse of the Lung and Pneumothorax."

W. F. Adams, Secretary.

OBITUARY

AARON A. McKELVEY, age 74, Van Buren, died in a Fort Smith hospital May 21st of heart disease after an illness of five days. Born at Bloomer, Sebastian County, he graduated from the University of Arkansas School of Medicine in 1894 and began the practice of medicine at Greenwood. Subsequently he entered government service with the Veterans Administration and finally was engaged as district health officer in Fort Smith, moving to Van Buren in 1935 to engage in private practice and act as city and county health officer. He was a member of the First Methodist church, of the Masonic lodge and of the Woodmen of the World. Surviving relatives are his wife, one son and four grandchildren.

JOHN CICERO HUGHES, aged 64, died at his home in Hoxie May 13th of heart disease. Born in Yellville, May 11, 1877, he graduated from Memphis Hospital Medical College in 1903 and had practiced in Hoxie for the past 37 years. During the World War he served with the army medical corps. In addition to his membership in the Lawrence County Medical Society, where he was serving as chairman of the committee on medical preparedness, and in the Arkansas Medical Society, he was a fellow of the American Medical Association, a member of the Methodist church and of the Masonic lodge. Surviving him are his wife, a son, Dr. Max Hughes, now with the army medical corps, and three daughters.

PERSONALS AND NEWS ITEMS

Announcement has been made of the "Synopsis of Operative Surgery" by H. E. Mobley, Morrilton, published by C. V. Mosby Company, Saint Louis, is to be published in a Spanish edition.

Staff appointments to the State Hospital for Nervous Diseases are A. C. Kolb, Hope, to be superintendent; N. T. Hollis, Little Rock, assistant superintendent and clinical director, and A. C. Watson, Little Rock, superintendent, Benton unit.

D. W. Dykstra, Little Rock, recently addressed an institute on venereal diseases at Little Rock.

The May Tri-State Medical Journal is the University of Arkansas School of Medicine Issue and contains the following articles: "From Proprietary School to State Medical Center: A History of the University of Arkansas School of Medicine," Carroll F. Shukers; "Encephalitis of Virus Etiology," John E. Greutter; "The Local Use of Sulfanilamide in Ophthalmology," K. W. Cosgrove and L. K. Hundley, and "Intestinal Obstruction (Our Contribution to Its Parade of Death)," J. K. Donaldson.

The following have been appointed to medical advisory boards for the selective service system in Arkansas: I. R. Johnson, Blytheville; R. R. Kirkpatrick, Texarkana; E. B. Swindler, Stuttgart; T. S. Van Duyn, Stuttgart; C. K. Townsend, Arkadelphia; S. N. Doane, Arkadelphia; N. E. Fraser, Conway; H. Fay H. Jones, Little Rock; L. H. Lanier, Texarkana, and T. F. Kittrell, Texarkana.

L. P. Good, Texarkana, addressed the staff of Baylor University Hospital, Dallas, May 20th, on "Periodic Paralysis Occurring in the Course of Exophthalmic Goiter."

Lts. C. F. and Robert Hyatt, formerly with the Medical Detachment, 153rd Infantry, at Camp Robinson, have been ordered for duty at the Medical Field Service School, Carlisle Barracks, Pennsylvania, for June.

F. S. Dozier, Wilson, has been ordered to active duty with the Army Medical Corps and assigned to Camp Robinson.

S. A. Drennen, Stuttgart, and Jos. F. Shuffield, Little Rock, have been elected president and first vice-president, respectively, of the Arkansas Wildlife Federation.

Chas. Wallis, Little Rock, attended the recent session of the American Academy of Pediatrics in Chicago.

John N. Roberts, Little Rock, has been called to active duty with the Naval Medical Corps and assigned to the Oklahoma City recruiting office.

Dr. and Mrs. B. J. Reaves, Little Rock, spent a May vacation in New York city and eastern points.

H. Fay H. Jones, Little Rock, attended the American Urological Association meeting in Colorado Springs during May.

Julius H. Hellums, Dumas, has been ordered to active duty with the Army Medical Corps and assigned to the Harbor Defenses of San Francisco.

R. F. Hoffman, Warren, has been ordered to active duty with the army medical corps and assigned to the 214th General Hospital, Camp Robinson.

MARRIED—R. M. Jernigan, Jonesboro, and Mrs. Lillian Cravens, Springdale, May 23rd.

Carl Wilson, Fort Smith, addressed the Crawford County Medical Society at Van Buren May 27th.

C. H. Lutterloh, Hot Springs National Park, took postgraduate work in internal medicine under Dr. Chester S. Keefer, Boston, and attended the sessions of the American College of Physicians recently.

E. C. Moulton has been elected president of the Noon Civics Club of Fort Smith.

Capt. Friedman Sisco, Medical Detachment, 142nd Field Artillery, Fort Sill, Oklahoma, is taking a special course at Carlisle Barracks, Pennsylvania.

The State Medical Board of the Arkansas Medical Society has elected the following officers: President, E. A. Callahan, Carlisle; Vice-president, R. J. Haley, Jr., Paragould, and Secretary, D. L. Owens, Harrison.

H. Fay H. Jones, Little Rock, recently addressed the graduating class at Saint Vincent's Infirmary Training School.

Dr. and Mrs. B. P. Briggs, Little Rock, spent a recent vacation in Florida.

W. Myers Smith, Little Rock, addressed the summer session at Arkansas Tech, Russellville, May 31st on "The Services the Department of Health Can Furnish Rural Schools."

S. S. Kirkland, Marshall, has been ordered to active duty with the army medical corps and assigned to 42nd Evacuation Hospital, Fort Leonard Wood, Missouri.

W. E. Turner, Jr., Piggott, has been ordered to active duty with the army medical corps and assigned to Corps Area Service Command Engineer Replacement Center Infirmary, Fort Leonard Wood, Missouri.

H. E. Cockerham, Portland, is recovering from thrombophlebitis at the Lake Village Infirmary.

B. D. Luck represented the Pine Bluff Rotary Club at the International Convention in Denver.

M. C. Crandall, Wilmot, has recovered from a dislocation of the shoulder.

The following were registered at the Cleveland session of the American Medical Association: Hoyt R. Allen, Little Rock; E. E. Barlow, Dermott; W. R. Brooksher, Fort Smith; C. A. Churchill, Batesville; S. P. Cromer, Little Rock; C. S. Early, Camden; Ross E. Fowler, Harrison; A. F. Hoge, Fort Smith; W. H. Horn, Taylor; Ruth Ellis Lesh, Fayetteville; V. O. Lesh, Fayetteville; J. A. Moore, El Dorado; Clyde D. Rodgers, Little Rock; Euclid M. Smith, Hot Springs National Park; J. E. Stevenson, Fort Smith; D. B. Stough, Jr., Hot Springs National Park, and R. H. Whitehead, DeWitt.

Howard A. Dishongh, Little Rock, has been elected treasurer of the Arkansas Tuberculosis Association.

Capt. L. M. Henry, formerly with the Medical Detachment, 142nd Field Artillery, Fort Sill, Oklahoma, has been transferred to the 50th Pursuit Group, Meridian Air Base, Meridian, Mississippi.

F. S. Dozier, Marvell, has been called to active service with the army medical corps and is now stationed with the 140th Regiment, 35th Division, Camp Robinson.

Paul Mahoney, Little Rock, has been elected First Vice-president of the University of Arkansas Alumni Association.

New appointments at the University of Arkansas School of Medicine are Byron L. Robinson, Dean, and S. C. Fulmer, Assistant Dean.

Ralph Crigler, Fort Smith, attended the International Kiwanis convention in Atlanta during June and later visited along the Gulf coast.

John M. Stewart has been elected surgeon of the Van Buren Legion post.

Dr. and Mrs. W. F. Adams spent a recent vacation in North Arkansas and at Lake Hamilton.

Ellery C. Gay, Little Rock, has been called to active service as Captain, Medical Corps, U. S. A., and assigned to Station Hospital, Fort Leavenworth, Kansas.

R. B. Robins, Camden, spent a recent vacation in Washington, D. C.

RANDOM THOUGHTS OF THE SECRETARY

May 21st. Regretfully we pass up the annual banquet session of the Crawford County Medical Society and become one of Eberle's team to examine selective service registrants. Scientifically, to our own satisfaction at least, we demonstrate by the finding of two umbilical hernias, that a radiologist can be a clinician. No doubt, some one will make a lot out of this claimed prowess of ours.

May 22nd. Now comes a new regulation of the selective service calling upon all examining physicians to determine the educational qualifications of all registrants prior to the physical examination, provided this has not been done by the local board. Next, we can investigate their

moral character and, if need be, issue army clothing at the time of examination.

May 24th. Visiting State Sanatorium this morning, now a beautiful institution and growing into a most efficient establishment under the direction of J. D. Riley with the enthusiastic support of an able staff. Impressed with the opportunity which is now afforded for the physicians of Arkansas to take a few days or weeks off for the study of tuberculosis in all its phases and the greater good which would result to the people of the state should this be generally done. Dr. Riley assures us that a cordial welcome, even to free meals and room, awaits any member of the Society who wishes to do special work in tuberculosis.

May 28th. Comes the annual Auxiliary picnic where abundant good food and joy combine for a happy party. Learning here of Rose's emergency patient, considered charity, who is found to have a bank roll just as the police cart him away.

June 1st. En route out of Saint Louis for Cleveland, a fair gathering of the House of Delegates aboard including colleague Barlow. The conversation runs generally to medical topics settling many of the problems and leaving others for another day. Arriving Cleveland and glad to step forth and partake of Statler hospitality.

June 2nd. Greeting many of the perennials this morning noting that the "trial" is uppermost in the minds of most of the delegates. During the early afternoon with reference committee work but managing to see Feller humble the Yankees, a source of satisfaction to the Arkansas delegation present which includes Barlow and Cromer. In the evening a gladsome function is the Ohio state dinner to the officers and members of the House of Delegates where entertainment of a professional caliber is furnished by musically-talented members of the Cleveland profession.

June 3rd. Our first wedding anniversary away from home and a telephone call is the best we can do about it. Cleveland is having cold, rainy, murky days and we are just as well satisfied to remain in the hotel, our vest having been left behind with Arkansas' summer weather.

June 4th. Today we have the opportunity to visit the auditorium and never have we seen such a wonderful arrangement. The scientific exhibit is better housed than ever before and affords the best in visual postgraduate instruction. Many are those who have decided to put in their hours here and we join them. Visiting with Stough, enthusiastic over the proctologic meeting, and seeing Kitchens, who wants more of his friends from Arkansas to come to these meetings. In the evening to the College of Radiology banquet where we alternate with Leon Menville in the relation of anecdotes, leaving, as may be expected, slight opportunity for the rest of the table to have their say.

June 5th. About the auditorium this morning and about some of the business districts as well, finally securing that "double-barrel pirate gun" which the youngster has sought, for these many months. The afternoon business session is speedily accomplished without speeches or other prolongations and we step aboard a Mainliner at five to step forth at Chicago one hour and fifty minutes later, having enjoyed a delightful dinner while cruising at 8,000 feet and seeing naught of the countryside except Put-in-Bay where Peary "met the enemy" many years ago. Some forty-five minutes later we take leave of Chicago and in four hours, a twenty-minute stop at Saint Louis intervening, we greet Peggy at Tulsa and joyfully motor home.

WOMAN'S AUXILIARY PAGE

MRS. RALPH CROSS, Publicity Secretary, Texarkana

HIGHLIGHTS OF THE CONVENTION

MRS. C. A. CHURCHILL, President

The Woman's Auxiliary to the American Medical Association met in Cleveland June 2-6, 1941, with Mrs. V. E. Holcombe, of Charleston, West Virginia, presiding.

The Convention chairman, Mrs. Fred C. Odenburg, of Cleveland, and her splendid committees, arranged many varied entertainment features for the pleasure of the 1,200 women auxiliary members and guests.

The first entertainment was a tea on Sunday afternoon for the Board of Directors, honoring Mrs. V. E. Holcombe, National President.

The Board of Directors' meeting on Monday morning was well attended where routine matters were discussed, and committees to serve during the convention appointed. This was followed by a lovely luncheon at the Petit Cafe in Hotel Carter.

One of the outstanding entertainments of the convention was the sight-seeing tour of Cleveland, out through beautiful Cuyahoga River valley to the airport, which is the largest municipally owned airport in the world, where the convention visitors were given courtesy flights over the city by the United Air Lines. This was greatly enjoyed by all. Leaving the airport, the groups were driven out to the Lake Shore Hotel, situated on lovely Lake Erie, where tea was served by the members of Cuyahoga County Medical Auxiliary.

Monday evening the Board of Directors were honored with a dinner at the Union Club, given by the hostess auxiliary. There was a most interesting talk on "Orchids" by Dr. Norman C. Yarian, who used many gorgeous varieties of orchids to illustrate his talk.

The first general session of the Woman's Auxiliary to the American Medical Association, which marked the formal opening of the Convention, was held Tuesday morning, in the ball-room of Hotel Carter. These sessions were held throughout Tuesday and Wednesday. Many interesting reports were heard, and informative speakers lectured to the assemblies.

There was a "Round Table Discussion" on "New Year" conducted by Mrs. R. E. Mosiman, incoming National President, on Tuesday afternoon, and much help and information, as well as inspiration, was obtained by your president at this meeting. This assembly was especially for state presidents and state chairmen.

The luncheon on Tuesday, honoring the past presidents, was in the Rainbow Room at Hotel Carter, the guest speaker being Dr. Nathan B. Van Etten. The annual luncheon on Wednesday was also in the Rainbow Room, and several interesting speakers were heard. Dr. Frank H. Lahey, incoming President of the American Medical Association, gave a clever and a most interesting talk, and following his address, The Honorable Hatton W. Sumners, Texas, Chairman Judiciary Committee, House of Representatives, U. S., Washington, D. C., gave an inspiring lecture.

The Post-Convention Board Meeting on Wednesday afternoon was very well attended, and talks were made

by the national chairmen of the various committees, concerning the coming year's work. The national committee chairmen requested that the state chairmen wait until sometime after the first of July before planning the year's program. This will enable the national officers to complete their plans along "Home Defense" lines, which will be the theme for this auxiliary year.

There were other social functions, such as receptions, dinners, dances, and so on, and all of the affairs were well planned and beautifully "carried out."

This was my first National Convention, and I enjoyed it immensely. I attended every business session, where I enjoyed meeting other state presidents, particularly those of our neighboring states. We plan to correspond during the year, and give to one another suggestions and help to be used in our "Home Defense" program. It is our earnest desire to do our best for our auxiliaries.

Mrs. Joe E. Tyson, retiring president of the Woman's Auxiliary to Bowie and Miller Counties Medical Societies, presided at the closing meeting of the season of the auxiliary, formally turning over the gavel to Mrs. L. H. Lanier, incoming president.

The meeting was held at the home of Mrs. Reavis Pickett, with Mrs. Perry Priest and Mrs. R. R. Kirkpatrick as co-hostesses.

Business session opened with repeating of the collect by members. Mrs. C. H. Frank was elected to serve as secretary for 1941-42, Mrs. Tyson called for yearly reports of committees.

Mrs. N. B. Daniel, delegate to the Arkansas state meeting in April, told that the state chairman of cancer control reported that 8,000 pamphlets and 10,000 handbills on cancer control were distributed over the state last year, and that the state auxiliary went on record creating a permanent tuberculosis library committee. This committee supervises the distribution of books and reading material for the State Tuberculosis Sanatorium.

Mrs. Ralph Cross, delegate to the Texas state meeting, reported that almost 2,000 doctors and doctors' wives registered for the Texas state convention. She announced that the health poster from Bowie-Miller Counties Auxiliary had won second place for the entire state.

Mrs. Hibbitts, immediate past president of the Texas Auxiliary, gave a report of the year's work under her supervision, which was interesting and instructive.

Mrs. J. T. Robison and Mrs. Allen Collom told of the state convention which they attended.

Mrs. Tyson, in turning over the guidance of the auxiliary to Mrs. Lanier, expressed appreciation of the co-operation of members during the year and wished Mrs. Lanier an even more successful year than she had enjoyed.

Mrs. Lanier announced her standing committees for the incoming year and expressed her appreciation of being elected to head the auxiliary during the coming year. She read a clever poem which appealed to all members.

At the close of the meeting, the guests were invited to the dining room and served dainty refreshments. The table was covered with a green satin damask cloth and centered with a beautiful urn filled with flowers.



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Those present were Mrs. Roy Baskett, Mrs. E. L. Beck, Mrs. S. A. Collom, Mrs. Allen Collom, Mrs. Ralph Cross, Mrs. C. H. Frank, Mrs. William Hibbitts, Mrs. J. T. Robinson, Mrs. Joe E. Tyson, Mrs. E. M. Watts, Mrs. W. V. Bessonette, Mrs. N. B. Daniel, Mrs. T. F. Kittrell, Mrs. L. H. Lanier, Mrs. A. G. Lee, Mrs. P. H. Phillips (Ashdown) and Mrs. J. F. Williams.

"Cross Patch" the lovely home of Dr. and Mrs. Ralph Cross May 25th, was the scene of a charming garden party given by members of the Bowie and Miller medical Auxiliary. The doctors' wives were hosts for a group of about 75 friends in addition to members of the Druggists' Auxiliary and the Dental Association Auxiliary.

"Cross Patch" is known for its permanent beauty in rich and rare flowers, imported shrubs, variety of trees and grasses. All of this natural beauty was enhanced by the gorgeous bowls of cut flowers, gladioli, lilies, roses, larkspur and spring flowers which adorned the tables. The guests were lavish in their comments of the beauties of the Cross home.

An informal program, presented by the daughters of the auxiliary members, was an enjoyable event of the party. The girls were beautiful in full-length party frocks of pastel shades with bracelets of spring flowers.

A May Pole dance was presented by Dorothy Ann Roberts, Joy Deaton, Ruth Rolf, Dorothy Good, Mary Maddox Collom, Janey Tyson, Jane Longino, Julia and Elizabeth Kitchens, accompanied by a duo of accordionists, Joyce Davis and Kathryn Winham. Following the May Pole dance, little Janet Tyson, daughter of Dr. and Mrs. Joe Tyson, gave a lovely dance entitled "Who'll Buy My Lavender?"

Retiring president of the Texas State Medical Auxiliary, Mrs. William Hibbitts, served the many guests a delicious ice cream and cookie bowl with iced drinks, from a table centered with a bright spring bouquet of larkspur, lilies and roses.

The home of Dr. and Mrs. T. P. Foltz was opened to guests May 28th when members of the Sebastian County Medical Society were entertained by the Auxiliary at a garden supper party. The hostess committee comprised Mrs. T. P. Foltz, Mrs. Charles T. Chamberlain, Mrs. W. R. Brooksher, Jr., Mrs. M. E. Foster and Mrs. Fred Krock.

A picnic supper was served buffet style from a large table decorated in garden flowers. Guests were seated in foursomes at smaller tables in the garden.

Guests were Dr. and Mrs. Charles T. Chamberlain, Dr. and Mrs. M. E. Foster, Dr. and Mrs. W. R. Brooksher, Dr. and Mrs. Fred Krock, Dr. and Mrs. Hardy H. Smith, Dr. and Mrs. M. M. Even, Dr. and Mrs. S. J. Wolfermann, Dr. and Mrs. Hugh Johnson, Dr. and Mrs. Carl Wilson, Dr. and Mrs. Ralph Crigler, Dr. and Mrs. W. F. Adams, Dr. and Mrs. Everett Moulton, Dr. and Mrs. I. Fulton Jones, Dr. and Mrs. S. P. Stubbs, Dr. and Mrs. J. S. Southard, Dr. Louise Henry, Dr. Murphy Henry, Dr. and Mrs. H. C. Dorsey, Dr. and Mrs. Charles S. Holt, Dr. and Mrs. W. F. Rose, Mrs. J. A. Foltz, Mrs. J. D. Southard, Mrs. J. E. Scott, Dr. Louis Whittaker, Dr. G. F. Stocker, Dr. Jim Amis, Dr. Ben Pride, Dr. P. D. Yankoff and Dr. J. H. Bennefield, all of Fort Smith.

Out-of-town guests were Dr. and Mrs. S. P. McConnell, Booneville; Dr. A. C. Curtis, Miss Sarah Weaver, Booneville; Dr. and Mrs. B. L. Ware, Greenwood, and Dr. and Mrs. Merle Woods, Huntington.

Mrs. W. F. Rose,

Publicity Chairman of the Auxiliary to the Sebastian County Medical Society.

BOOK REVIEWS

MacLeod's Physiology in Modern Medicine: Edited by Philip Bard, Professor of Physiology, Johns Hopkins University School of Medicine. Ninth edition. Pp. 1256. Price \$10.00. Saint Louis: C. V. Mosby Company, 1941.

The author with nine collaborators have revised this authoritative work, each chapter being brought up-to-date. The general plan of the work remains the same and the book continues to be a valuable text for both physician and student. The use of glare-eliminating paper is a decided advantage.

Physical Medicine: By Frank H. Krusen, M. D., F. A. C. P. Associate Professor of Physical Medicine, the Mayo Foundation, University of Minnesota; Head of the Section on Physical Therapy, The Mayo Clinic; Member of the Council on Physical Therapy of the American Medical Association; Past President of the American Congress of Physical Therapy; Past President of The Academy of Physical Medicine. 846 pages with 351 illustrations. Philadelphia and London: W. B. Saunders Company, 1941. Price \$10.00.

The subject of physical therapy is well covered in this volume and it is felt that such a discussion of this agency will serve to again bring it into good repute. Each agent is presented from the viewpoints of physics, physiologic effect, the technic of employment, the indications and contraindications.

The 1940 Yearbook of Radiology. Edited by Charles A. Waters, M. D., Associate in Roentgenology, Johns Hopkins University, etc., Whitmer B. Firor, M. D., Assistant in Roentgenology, Johns Hopkins University, etc., and Ira I. Kaplan, B. Sc., M. D., Director, Radiation Therapy Department, Bellevue Hospital, etc. Pp. 496. 497 illustrations. Price \$5.00. Chicago: The Yearbook Publishers, Inc., 1940.

The enduring value of this yearbook is maintained in the current volume where the editors have also contributed original articles. The editors deserve much commendation for their service in making available to radiologists generally a comprehensive survey of the world's literature. Every radiologist should have this book for study and reference.

Electrocardiography in Practice: By Ashton Graybiel, M. D., Instructor in Medicine, Courses for Graduates, Harvard Medical School; Research Associate, Fatigue Laboratory, Harvard University; Assistant in Medicine, Massachusetts General Hospital; and Paul D. White, M. D.; Lecturer in Medicine, Harvard Medical School; Physician, Massachusetts General Hospital, in charge of the Cardiac Clinics and Laboratory. 319 pages with 272 illustrations. Philadelphia and London: W. B. Saunders Company, 1941. Cloth, \$6.00.

This practical presentation of the common problems in clinical electrocardiography answers a real need on the part of those clinicians who are attempting conscientiously to continue their studies in this field. The text, as the authors state in their preface, is arranged primarily for teaching purposes. While it probably fulfills that function admirably from that standpoint, it also performs an even greater service to those of us in the clinical field. Particularly is this true in the arrangement of the second half of the text. In the first half, there are, in

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1. Knight, F., and Shelanski, H. A., "Treatment of Acute Anterior Urethritis with Silver Picrate," Am. J. Syph., Gon. & Ven. Dis., 23, 201 (March), 1939.

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order, 142 electrocardiograms illustrating normal variations, the several disorders of rhythm, and the etiological types of heart diseases. In the second half, 130 cardiograms are presented at random for practice in interpretation. Each of these tracings is accompanied by notes relating to the clinical features of the case. The arrangement is such that the reader can make his own interpretation without prejudice. A perusal of these "test" tracings reveals the fact that they have been chosen to illustrate not only the various disturbances in rhythm but, what is more important, the characteristic findings in the different types of heart disease. Furthermore, the selection consists of tracings which are commonly seen and emphasis is not placed upon unusual curves. Those clinicians who are interested in further study of clinical electrocardiography will find this presentation an invaluable aid.

An Introduction to Dermatology. By Richard L. Sutton, M. D., Sc. D., LL.D., F. R. S. (Edin.), Emeritus Professor of Dermatology, University of Kansas School of Medicine, and Richard L. Sutton, Jr., A. M., M. D., L. R. C. P. (Edin.), Assistant Professor of Dermatology, University of Kansas School of Medicine. Pp. 904. 723 illustrations. Price \$9.00. Fourth edition. Saint Louis: C. V. Mosby Company, 1941.

For the fourth edition of this desirable treatise on skin diseases, little need to be said in its behalf. It is a small counterpart of the famous larger text, "Diseases of the Skin," by the same authors. The book is well worth while and will be of much help to the busy general physician who is called upon to care for many of the common skin ailments.

Applied Pharmacology. By Hugh Alister McGuigan, Ph. D., M. D., F. A. C. P., Professor of Pharmacology and Therapeutics, University of Illinois College of Medicine. Pp. 914. Price \$9.00. Saint Louis: C. V. Mosby Company, 1940.

The author has written a new type of book on the subject basing his discussion upon the underlying chemical and physiological changes which accompany pharmacologic action. This is an important text for instruction in pharmacology.

Manual of Physical Diagnosis: By Maurice Lewison, M. D., Professor of Physical Diagnosis, University of Illinois College of Medicine, etc., and Ellis B. Freilich, M. D., Associate Professor of Medicine, University of Illinois College of Medicine, etc., with the collaboration of George C. Coe, M. D., Instructor of Medicine, University of Illinois College of Medicine, etc. Pp. 3170. 75 illustrations. Price \$3.00. Chicago: The Yearbook Publishers, 1941.

This is an excellent manual that should be of practical use to the medical student, interne or resident. The material is well written, easily read and to the point. Superfluous theories are left out, and only the practical and essential points for physical examination are included.

The chapters on the cardiovascular and respiratory systems are particularly good. The presentation is clear and concise, with explanations on how to make examinations. It also describes the more commonly encountered pathological conditions with the accompanying physical findings.

Even the busy general practitioner who has so little time to read might well spend a short time brushing up on the finer points of physical findings so adequately described in this manual.

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No. 3

A VACCINE FOR EPIDEMIC INFLUENZA: PRELIMINARY REPORT*

F. M. ACREE, M. D.
Greenville, Mississippi

Although influenza is one of the oldest clinical entities known to medical science, only within the past eight years has any significant progress been made toward an understanding of the exact etiology and diagnosis of the disease or methods of its prevention. Our present knowledge along these lines was initiated in 1933 with the isolation of a virus from the throat washings of patients with influenza, by Smith, Andrewes and Laidlaw (9), and their demonstration that antibodies against the virus were produced during convalescence from an attack. Investigation has since led to the discovery that there are a number of antigenically different strains of this virus. Moreover, it is now believed that other types of virus may also give rise to the syndrome characteristic of influenza. Horsfall (3) reports that evidence accumulated at the Rockefeller Foundation from studies of nine epidemics during the past year indicates that any case in any epidemic may result from infection by one or more of three different agents.

For the purpose of classification, the virus discovered by Smith and his co-workers has been designated as type A influenza virus. In 1940, another type, called influenza B virus, was identified by Francis (2) in the throat washings of children inmates of an institution wherein an epidemic occurred. Further light has been thrown upon this matter by Taylor, Petrilla and Dreguss (10). In an analysis of morbidity reports of influenza in Hungary over a ten-year period, these workers were able to distinguish two forms of the disease, encountered in different years. One, which was recognized as influenza A, attacked more or less indiscriminately persons of all ages and was widespread in extent. The second type

attacked almost exclusively children less than ten years of age, and occurred in sporadic, localized epidemics. No virus was isolated from the patients affected during epidemics of the latter type. Investigation will, no doubt, be continued regarding this phase of the disease. Meanwhile, however, little information is available regarding any form of influenza other than that caused by the A virus, which is commonly called epidemic influenza.

The difficulty of making a diagnosis of influenza from physical signs alone, and the impracticability of attempts to isolate the virus in each patient has led to the necessity for more positive and more widely applicable diagnostic measures. Accordingly, two methods of differentiation have been developed; the complement fixation test, which was originally advocated by Smith (8), and the neutralization test, introduced by Laidlaw, Smith, Andrewes and Dunkin (5). These tests are carried out with an antigen prepared from mouse lungs infected with the influenza A virus, and sera of one blood specimen taken, preferably, within three days, and not later than five days following onset of the illness, and a second specimen taken after approximately two weeks. The diagnosis is apparent by a fourfold or more rise in antibody titer or the serum at the second test as compared to the titer at the first.

Both these tests are fairly reliable for detecting the presence of specific antibodies against the virus in the blood serum of human beings. The complement fixation test is advantageous in that it may be completed within ten days to two weeks, whereas the neutralization test requires three weeks; the complement fixation test, moreover, may be made with ordinary equipment used in Wassermann tests, the only material necessary being the influenza A virus antigen. On the other hand, the neutralization test is slightly more thorough and is useful for checking results of complement fixation tests which appear to be

* Read before the Sixty-sixth Annual Session, Arkansas Medical Society, Little Rock, April 15, 1941.

doubtful, or for determining strain specificity to antibodies.

In order to gauge more accurately the relationship of antibody titer to immunity or susceptibility to influenza, and the importance of subclinical infections, i.e., those wherein an elevation of antibodies is observed without associated physical symptoms, Rickard, Lennette and Horsfall (7) studied the preepidemic and postepidemic blood sera of 819 individuals whose ages ranged from four to eighty-five years. Fifty-nine of the group developed frank influenza A, as proved by a more than four-fold increase in antibodies following infection. In addition, a significant rise in antibody level was observed at the second test in the sera of 63 who experienced no manifestations of the disease. No increase in titer was demonstrated in the remainder of the 819 individuals, although 35 of these were seized with attacks in every respect resembling influenza. It was found, with few exceptions, that susceptibility to influenza A was in inverse ratio to antibody titers, the attack rates being highest among those whose preepidemic antibody levels were lowest; further, that both preepidemic and postepidemic antibody levels varied in different persons. A similar observation was made from preepidemic and postepidemic serological tests of those with subclinical infections. The fact that a few with relatively high preepidemic titers also developed influenza led the authors to doubt that a critical antibody level exists which assures immunity to infection by the influenza A virus. Others disagree with this opinion, believing that a critical zone of antibody concentration may be defined.

Pursuing this study further, the authors found that, although the antibody titers of persons who contracted influenza had diminished materially one year following recovery, they remained significantly higher than prior to the attack. As was true of the preepidemic and postepidemic sera of those who developed clinical signs of the disease, the titers of those whose antibody levels had increased without corresponding symptoms showed a decline after one year. It is also noteworthy that the titers of persons who were not infected with influenza A remained practically constant for one year or longer.

The above findings not only confirmed previous observations by several investigators, but have themselves been substantiated in a more complete study by Eaton and Rickard (1). In addition, these authors presented evidence which

would indicate that an increase in complement fixing antibodies is characteristic of epidemic influenza alone, and does not occur in other respiratory diseases or in normal individuals who have not been exposed to epidemic influenza. For this reason, they suggested that a diagnosis of epidemic influenza in a group of individuals might be possible on a basis of clinical histories and complement fixation tests with serum taken during convalescence, even though no preliminary blood specimen has been obtained. They found that antibody titers reach their highest level within ten to fourteen days after onset of the illness, and therefore recommended this period as the most opportune for taking the specimens.

The question of whether infection by one strain of influenza A virus provides immunity against other strains is not clear. Magill (6) is of the opinion that a second attack may be induced by a virus which differs antigenically from that which incited the first illness. Horsfall (4) reports, however, that experiments in the laboratories of the Rockefeller Foundation show that the rise in neutralizing antibody titer which follows influenza A is independent of the virus; he regards it as probable, therefore, that infection by one strain provides immunity to different strains of the virus.

The fact that a definite correlation exists between preepidemic antibody titers and susceptibility to influenza A has formed the basis for a number of attempts to find an effective vaccine against different strains of the virus. The newest, and to the present time the most promising of these vaccines has been developed within recent months at the Rockefeller Foundation, from chick embryos inoculated with the PR8 strain of influenza virus and the X strain of distemper virus. Preliminary studies revealed that a single subcutaneous injection into human beings stimulated the production of additional neutralizing antibodies against influenza A. Further, the increased antibody titers were found to have remained constant for at least three months.

To determine the actual immunizing power of this vaccine, the Rockefeller Foundation is conducting a nation-wide survey through public health agencies. Samples have been sent to these organizations with the request that it be administered in 1 c.c. doses subcutaneously to normal individuals. Also, that a 10 c.c. specimen of blood be taken from each of five persons in each group both before and fourteen days after

vaccination, and that these specimens be sent to the Foundation laboratories for testing. Through the courtesy of Dr. Felix J. Underwood, Executive Officer of the Mississippi State Board of Health, the author has been privileged to administer personally this vaccine to fifty individuals, all of whom were in good health.

According to information which accompanied the vaccine, the majority of those inoculated develop a small area of erythema about the site of infection, and local tenderness for a day is not unusual; constitutional symptoms, however, had not been encountered. Of the fifty whom the author inoculated, the majority developed an area of hyperemia at the site of injection, but no other reaction. One experienced a slight generalized aching accompanied by an elevation of temperature to 100 degrees, though both these manifestations subsided completely within about four hours, after the patient slept for a short while. Only one of the inoculations appeared to have no effect. This patient stated that she had a definite attack of influenza ten days after the injection, being confined to bed with fever and a typical aching for a period of four days. It is possible, of course, that the illness may have been induced by some other virus than that of influenza A. Three of the patients in the group had no reaction other than a slight stinging sensation locally, which disappeared within a few minutes.

Specimens of blood were taken from five of these individuals before and fourteen days after inoculation and were sent to the Rockefeller Foundation laboratories for study. A report of their findings has not yet been received.

In this connection, Dr. A. L. Gray, Director of the Division of Preventable Disease Control of the Mississippi State Board of Health has been kind enough to give me the benefit of his experience with this vaccine. Of 81 persons whom he inoculated, the majority developed local induration, hyperemia and tenderness; twenty-two had a slight rise of temperature; several complained of mild generalized aching or headache, and a few had herpes around the mouth. Five had no reaction whatever. It was believed that one of the group had a mild attack of influenza. Dr. Gray was of the opinion that, on the whole, the reactions were similar to and no more extensive than those which follow inoculation with typhoid vaccine. He pointed out, moreover,

that the injections were given during the peak of an epidemic of influenza in the state.

To the foregoing report Dr. Underwood added the statement that no members of their Board of Health developed influenza after taking the vaccine, whereas, during the previous winter twenty-five of his staff members were absent from duty for approximately a week each because of influenza.

These personal experiences, while admittedly limited, are, nevertheless, illuminating. If similar results are reported by others whose assistance has been enlisted in this survey, wide adoption of the vaccine against epidemic influenza would seem justified. Certainly, evidence thus far available indicates that real progress is being made in the solution of this problem, one of the major health projects of the present day; in fact, one is led to hope that the time is not far distant when the conquest of influenza will be as complete as that of smallpox and yellow fever. The scientists at the Rockefeller Foundation and elsewhere who are working on this problem deserve our wholehearted cooperation in their efforts toward this end.

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PAIN AND THE MENSTRUAL CYCLE*

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Most women suffer a certain amount of discomfort as a result of the menstrual function, either physical or mental or both, varying in degree from slight physical pain or mental depression to total incapacity. The duration may be from a few hours to several days. The pain is not necessarily co-menstrual, indeed, in many cases it is most marked in the premenstrual period, and is relieved soon after the onset of the menstrual phase or it may persist throughout the entire period and even into the postmenstrual or early growth phase of the menstrual cycle. Pain associated with the menstrual cycle is not confined to the organ of menstruation or the other pelvic structures. Headache is a common symptom and may occur before during or after the menstrual flow. Generalized aches and pains, especially of the legs, and low backache are common symptoms. Periodic interval pains are not uncommon. Painful breasts and dysmenorrhea are the conditions most frequently complained of. In order to put the matter more clearly before you, I shall discuss the major points separately.

(1) Headache: Headache may occur at any time during the cycle, but a statistical study by McCanse and associates showed that it was most prone to occur on the 3rd day of the cycle with a gradual decrease to the 20th day. Most menstrual headaches are relieved by simple measures, but in many cases the pain is exceedingly severe and may last from one to two days and requires the most potent remedies for relief. This severe type occurs just before or during menstruation. They frequently begin at puberty, are absent during pregnancy, and cease after the menopause. The condition is frequently spoken of as "menstrual migraine" because nausea and vomiting is often associated with it. However, the visual disturbances of true migraine are usually not present. The etiology of headache associated with the menstrual cycle has not been determined. Some investigators have advanced the idea that hyperactivity and swelling of the anterior lobe of the pituitary is responsible. The fact that the headache does not occur during pregnancy when the gland attains its greatest size would seem to disprove this idea. Migraine is generally regarded as an allergic manifesta-

tion. Menstrual headaches are more prone to occur in women of the hypogonad type in whom it is expected to find an excess of pituitary follicle stimulating hormone; this coupled with the complete relief during pregnancy, strongly suggest hypersensitiveness to the gonadotropic hormone of the pituitary. Additional evidence is the presence of a low estrogen and high gonadotropin excretion in many of these patients during an attack of migraine.

Treatment: Estrogenic hormone in large doses 20,000 to 50,000 I.U. every third day has been very effective in a large percentage of cases. In those cases which do not respond there probably exists some other cause which should be determined and eliminated. After the patient has been relieved for a period of two months the dose of the hormone should be reduced gradually over a period of several months.

(2) Backache: Low backache is a frequent symptom, it usually occurs late in the premenstrual phase or on the day of onset of flow. As a rule it subsides gradually after menstruation begins. In the majority of cases it is not due to menstruation at all, but rather is caused by some pelvic pathology or orthopedic condition such as faulty posture, relaxation of the pelvic joints or spinal disease. Such backache is usually accentuated by the pelvic congestion preceding menstruation. Occasionally one sees a case where no pathology can be found to account for it. These cases might be correctly classified as of endocrine origin. Chamberlain believes it is due to temporary relaxation of the pelvic joints caused by a hormone secreted by the corpus luteum. He demonstrated the increased relaxation by x-ray using a special technique. It has also been shown that an even greater degree of relaxation sometime occurs during pregnancy. Treatment of such cases consists of strapping or binding the pelvis as tightly as possible to prevent any undue mobility. Broad strips of adhesive should be applied so that they pass well onto the front of the body below the anterior superior spines of the ilium. If this gives the patient relief, then a belt should be obtained as the prolonged application of adhesive tape will inevitably cause skin irritation.

(3) Periodic Interval Pain: Periodic pain occurring in the lower abdomen was described by Pouchet in 1847, by Priestley in 1872, and by Fehling in 1881. Since then it has been reported and discussed on numerous occasions. Wharton and Henriksen in an article in the Journal of the

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American Medical Association summarized the evidence supporting the belief that it is associated with ovulation. The incidence of this condition is unknown as only the severe cases are called to the attention of the physician. Probably many more would be revealed by careful questioning of all gynecological patients, and furthermore it is quite probable that in the milder cases, the slight discomfort does not register in the patient's memory and if she does remember repeated attacks of lower abdominal discomfort, she has failed to note the time relationship to menstruation.

The belief that periodic intermenstrual pain is associated with ovulation is supported by the facts that it begins after puberty, is not experienced after the menopause, or during pregnancy and that it occurs at a time coincident with ovulation. Several theories have been advanced as to the etiology of the pain, among them being peritoneal reaction resulting from the rupture of the tunica albuginea of the ovary, increased uterine contractions, excessive peristalsis of the fallopian tubes, intra-cystic hemorrhage, etc. None have been proved. The fact that slight uterine bleeding sometimes occurs gives some weight to the theory of increased uterine activity. This is offset by the fact that the pain is often unilateral. Organic pathology of the pelvic structures may co-exist but in the majority of cases none can be demonstrated. In those cases reported as being operated at the time of the pain most of them showed mature ruptured graffian follicles or corpora lutea, some of them with blood oozing from the point of rupture, others revealed hemorrhage into a follicle or corpus luteum cyst. In two of my own cases upon whom I operated because of symptoms indicating a surgical emergency, both had recently ruptured follicles from which blood was spurting freely and both had considerable blood in the peritoneal cavity. Some of these patients complain of headache, malaise and nausea. The diagnosis of the chronic form may be made from the patient's history if evidence can be obtained pointing to the occurrence at a time coincident with ovulation. It is very difficult to differentiate the acute form with marked hemorrhage from other acute abdominal conditions, especially appendicitis and ruptured ectopic pregnancy. The prognosis is uncertain. It may persist until the menopause or it may disappear suddenly at anytime. There is no specific treatment other than castration, which certainly is not justified. Sedatives for relief

when necessary is the best treatment at the moment.

(4) Painful Breasts: I here refer to premenstrual mastalgia. Breast changes varying in character and intensity occur during the postovulatory phase of the menstrual cycle. These changes are frequently associated with pain and marked tenderness of the glands. There is considerable difference of opinion regarding the cause of the pain and tenderness. Many believe it is due to an excessive proliferation and subsequent desquamation of epithelial cells in the acini and terminal ducts accompanied by hyperplasia of the surrounding connective tissue, others stress the hyperemia, edema and increased density of the connective tissue. The etiology of this condition is unknown. Its definite association with the menstrual cycle seems to prove that it is the result of dysfunction of the glands concerned with menstruation. Some believe it is due to hyperfunction of the corpus luteum. Mazer attributes it to an anterior lobe factor. The condition occurs most commonly after thirty years of age and may persist until the menopause. The breasts contain a hard finely nodular mass usually in the outer upper quadrants.

Treatment: Occasionally spontaneous recovery occurs. However, it may recur from time to time. No one method of treatment is satisfactory. Proper support of the breasts is important, not that it has any curative value but because the partial immobilization affords some degree of comfort, just as does the splinting of any other inflamed or painful tissue in the body. Estrogenic hormone seems to be specific in many cases. Unusually large doses are not necessary in the average case, 0.5 mg. twice weekly will suffice as a rule, but larger doses should be used if relief is not obtained within a reasonable time. In support of the statement that the etiology of this condition is not known, it has been found that some patients obtain greater relief from progestin. In my experience this is often true in those individuals who are in the early climacteric period. The pain is relieved by the premature induction of the menopause by castration. This is indeed a radical step and certainly is not justifiable, except when coexistent pathology makes it necessary.

Dysmenorrhea: Pelvic pain occurring just before or during menstruation is a common complaint. We divide these patients into two groups: (1) those in whom no gross pathologic pelvic lesions can be demonstrated, are classified

as primary dysmenorrhea; (2) those in whom organic pelvic disease is found, as secondary dysmenorrhea. In the second group the menstrual pain is a symptom of the associated disease and the diagnosis, pathology and treatment are concerned solely with the primary cause. A review of the literature should be sufficient to convince anyone that the cause of primary or intrinsic dysmenorrhea has not been ascertained. In fact, I believe that in the light of our present knowledge we would be forced to conclude that no single factor is responsible for this distressing ailment. Most writers agree that the factor producing primary dysmenorrhea is a pathologic sensitiveness of the nerve endings in the isthmus of the uterus resulting in exaggerated and incoordinated uterine contractions. The basic cause is obscure but many theories have been advanced. The etiological factors have been divided into those which predispose to and those which excite the occurrence of the symptoms. I do not have time to discuss these causes, but will merely call them to your attention. Predisposing factors frequently mentioned are: (1) Endocrinopathies, such as an imbalance in the normal estrogen progestin equilibrium, i.e., excessive estrogen action or deficient luteinization with consequent insufficiency of progestin, or hyperactivity of both the graffian follicle and corpus uteum producing an excess of hormones resulting in the formation of an excessively thick endometrium, which is not completely disintegrated and is thrown off in large fragments and, as foreign bodies, reflexly stimulate a hypersensitive uterus to colicky contractions. This condition is referred to as membranous dysmenorrhea. (2) Hypoplasia of uterus: It has been shown from sounding that the hypoplastic uterus is more irritable than the normal organ. (3) Psychic trauma: Many primary dysmenorrheics are the victim of an over-solicitous mother, who herself has suffered from the same ailment. (4) General or constitutional disease, overwork or worry act to lower the threshold for pain and are important predisposing causes. (3) An allergic reaction of the uterus to certain substances undoubtedly accounts for a number of these cases. It is analogous to the same reaction often seen in the colon. Exciting causes: It has been shown graphically by Moir that the normal rhythmic uterine contractions become stronger just before and during menstruation and that in instances of primary dysmenorrhea, they are markedly exaggerated. He also observed that the peak of

each uterine contraction coincided with the acme of pain and disappearance of pulsation in the uterine artery. He, therefore, reached the conclusion that the pain of primary dysmenorrhea is due to a relative ischemia of the myometrium, a condition similar to that of angina pectoris. Kieffer in 1933 postulated that the pain resulted from uterine contractions initiated by highly specialized sensory nerve cells which he demonstrated to be present in the endometrium at the level of the internal as through a spinal reflex arc. It is a reasonable hypothesis that the increased irritability of the uterus during the premenstrual and menstrual phases of the cycle, might in the hypersensitive individual set in motion the impulses which result in dysmenorrhea.

Treatment: As might be suspected from the numerous theories of the cause of primary dysmenorrhea, there have been even a greater number of specific therapeutic measures advocated. For each there have been claims of varying degrees of good results, and their subsequent fall by the wayside is adequate proof of their failure. One cause of our unsatisfactory results is, I believe, our failure to regard the condition as a symptom instead of a clinical entity. Treatment must of necessity be divided into measures for immediate relief and those by which we hope to effect a permanent cure. In the first, we are concerned chiefly with drugs and measures to relieve the patient either by reducing her perception of pain or lessening the irritability of the uterine muscle. A mild sedative may be effective if used with a drug to relieve muscle spasm. Of the newer antispasmodic preparations, I have found syntropan to be most effective. Rest in bed and the application of heat to the pelvis aid in obtaining the desired relief.

The first step in the management of these cases when our aim is permanent relief, should be a careful evaluation of the patient from a physical, mental and environmental standpoint. Individualization is important. Search should be made for foci of chronic infection and their removal effected if found, a well-balanced diet high in vitamins and calcium, good bowel elimination, adequate mental and physical rest, sufficient out-door exercise and amusement are all essential. Many of these patients are anemic; especially are they likely to have a deficiency of hemoglobin, therefore, hematinics are frequently an important part of the treatment. A change of environment is necessary if it is found that the one in which she lives is conducive to neurosis.

This, of course, is not always possible. The sexual habits of the patient should be investigated. Sexual excitement without relief causes chronic pelvic congestion and may result in neuroses and painful menstruation. This may result from long engagement, coitus interruptus, masturbation, etc. Fear born of ignorance of the true significance of the menstrual cycle and its related phenomena may be a factor. In such cases a simple explanation and reassuring talk may be of great value. The use of various endocrine products in the treatment of intrinsic dysmenorrhea has become wide spread.

Estrogen: The estrogenic hormones either orally or hypodermically are of distinct value in cases associated with hypoplasia of the uterus. Various sized doses have been advocated. I usually give 1 mg. or 10,000 I.U. intramuscularly twice weekly combined with 2,000 to 4,000 I.U. daily by mouth throughout the interval. If, and when, stilbestrol is approved and becomes available, I believe its use orally will largely replace the hypodermic administration of the estrogens except where unusually large doses are indicated.

Progestin: The intramuscular administration of 1 to 2 mg. of progestin daily or every other day for 7 to 10 days preceding the menstrual flow is of value in preventing the painful attacks in a great many cases due to its ability to prevent uterine contractions. Often when given after the pain begins it affords relief in three or four hours.

Gonadotropins: The chorionic and pituitary gonadotropes have apparently afforded relief in some cases, through their action in stimulating ovarian function. The **pituitary like** hormones are thought to also have some direct effect on the uterine muscle due to the rapid results which have been noticed.

Testosterone: The male sex hormone testosterone propionate, undoubtedly has proved itself effective in averting attacks or dysmenorrhea when given in doses of 5-10 mg. every other day for a week preceding menstruation, but it is in disfavor with many because of the fairly high percentage of cases reported to have developed irreversible male characteristics such as beard and coarse voice.

Thyroid: A great many dysmenorrheics have some degree of thyroid deficiency. The Crosens believe it is the most important single endocrine disturbance. It is associated with an atonic state and a lowered threshold for pain exists. A basal metabolism test should be done, or a therapeutic

test made by putting the patient on a small dose of thyroid and gradually increasing under careful supervision.

Insulin: Excellent results from the use of insulin 10-15 units daily have been reported. Mazer states that it is the only endocrine product which in his hands has rendered permanent results in even a small percentage of cases. It is believed that, in addition to its stimulating effect on the general metabolism, it has in some unknown way a favorable and lasting influence on ovarian function.

Irridation: Low dosage roentgen irradiation of the ovaries or the hypophysis causes temporary increased cellular activity and is of value in certain cases, especially those who menstruate irregularly. It is not without danger.

It is quite evident that none of the measures which I have mentioned are capable of giving permanent relief in primary dysmenorrhea, but I do believe that anyone of them will in certain cases give temporary relief and then if the proper measures are instituted for improving the patient's physical and mental condition thereby elevating the threshold for pain and relieving her of fear and apprehension, many of these unfortunate sufferers will be cured.

The Holland-Rantos Company have been appointed exclusive distributors for Rantex, the newest development for surgical masks and caps—a patented fibre product which is insoluble in live steam, boiling water or common solvents. A magnification of Rantex shows that it is 176 times more protective than a single layer of gauze. As a result, it provides masks and caps which are exceptionally cool, comfortable, light and free from irritating lint or yarn. They are inexpensive enough to be discarded after a single use; yet they can be autoclaved or sterilized.

The masks are shaped to fit the face; the caps are well tailored. The masks and caps are already being used in many hospitals—including Doctors Hospital in New York, University of Pennsylvania Graduate Hospital in Philadelphia, United States Marine Hospital in Boston, Wisconsin General Hospital, University of Wisconsin in Madison, Wis., and the East Oakland Hospital in Oakland, Calif.

COMING MEDICAL MEETINGS

Tri-State Medical Society, Texarkana, September 23-24th.

HISTORY OF THE ARKANSAS MEDICAL SOCIETY

Compiled by the Committee

Frank Vinsonhale, Chairman, Little Rock; M. L. Norwood, Lockesburg; E. F. Ellis, Fayetteville; Robert Caldwell, Little Rock; W. T. Wootton, Hot Springs National Park; H. Moulton, Fort Smith; J. M. Lemons, Pine Bluff; E. E. Barlow, Dermott; D. A. Rhinehart, Little Rock; W. H. Mock, Prairie Grove; L. J. Kosminsky, Texarkana; F. O. Mahony, El Dorado; M. E. McCaskill, Little Rock; Geo. B. Fletcher, Hot Springs National Park; O. J. T. Johnston, Batesville; S. J. Wolfermann, Fort Smith; A. S. Buchanan, and H. T. Smith, McGehee.

BRIEF HISTORY OF MEDICINE IN NORTHWEST ARKANSAS

E. F. ELLIS, M. D.
Fayetteville

My knowledge of the history of medicine in Arkansas began in January, 1883, when I was accepted by my preceptor, Dr. John Young, of Springdale, Arkansas, as a student of first year medicine. Dr. Young was the father of the late Dr. Frank B. Young, who practiced in Long Beach, California, until his death this year, and Mrs. Daisy Young Holcomb of the department of Zoology at the University of Arkansas. He was not only a learned physician, but had a stock of useful knowledge equal to that of any man I have ever known. He was, as I remember, the only graduate of medicine in Springdale at that time. He was so capable that he had a large and desirable following. He always stood for high standards in ethics and would frown on things that savored of charlatanism and quackery with more derision than any medical man I have ever known. I naturally absorbed some of Dr. Young's ideas on charlatanism, probably to my detriment in some instances.

What I have to tell of the history of medicine in Arkansas will be limited mostly to Northwest Arkansas where my professional activity has been confined for fifty-six years. These fifty-six years have witnessed many changes in the practice of medicine, in transportation as well as in medical service and equipment. Going on foot-up hills where a horse could not climb, and crossing rivers in a skiff, or occasionally swimming swollen creeks on horseback, to find someone waiting on

the other side of river or hill to take the doctor to the patient, all were common experience in early medical practice. For many years doctors traveled on horseback, with saddle-bags; then came the horse and buggy period, with the medicine case; later came the automobile. During the early days laboratory methods, except in a meager way, were not known or employed, and asepsis and antisepsis had just crossed the horizon and were being vaguely considered, although Lister had many years before demonstrated their value. Beginning with the automobile days came the more elaborate laboratory and special equipment for diagnosis and treatment of disease that made it more difficult to keep up with scientific methods and treatment.

In the eighties Northwest Arkansas had a number of very worthy practitioners. Bentonville at that time had Dr. Thomas Hurley, one of the earlier presidents of the Arkansas Medical Society. He was a fine southern gentleman and a good physician. Doctors Hobbs, Smart and Tallifer were other Bentonville physicians. Rogers had Doctors D. Weems and M. Rice; and Lowell had my life long friend, Dr. W. J. Curry, now of Rogers. He is probably the oldest active practitioners in Arkansas. He is almost ninety years old, a marvel of physical and mental activity. He and I are now the only two left who were in practice in the early eighties in Northwest Arkansas.

Located in Fayetteville were Doctors T. J. Pollard, A. S. Gregg, C. S. Gray, H. D. Wood, W. B. Welch, all men of the highest attainments, men who would have ranked with those of the greatest ability in any large city. I sometimes question whether succeeding physicians in Fayetteville will be able to maintain the high standards set and maintained by these elegant medical gentlemen. I wish to state at this point, however, that Fayetteville has some of the best qualified and most ethical young physicians of any city I know of.

Doctors Yates and Lacy were located at Cincinnati. Both were of superior ability. Dr. Yates afterward moved to Fayetteville, where he was an outstanding physician up to the time of his death in 1918.

EDITORIAL NOTE: This is the seventh installment of the preliminary draft of a History of the Arkansas Medical Society. Subsequent issues will contain additional sections of the history as now prepared. The Committee will welcome suggestions or additions which the membership shall care to present.

Dr. E. G. McCormick, of Prairie Grove, in the eighties, was a most worthy gentleman in his profession. Dr. Fred Massie and Dr. M. Knight of Huntsville were active and worthwhile physicians in Madison county. Dr. J. B.

Bolton, of Eureka Springs, and Dr. W. P. George, of Berryville, were highly respected physicians and citizens in their respective towns. These men of the eighties all lived and died in their respective communities an honor to the profession.

Coming later, at Bentonville, were Dr. C. E. Hurley, Dr. Charles Cargile and others; at Siloam Springs, Dr. Joseph T. Clegg, Dr. I. L. Smiley, whose memory I revere, Dr. J. W. Webster and others; at Springdale, the Doctors Christian, Moses Stearns, Frank Young; at Fayetteville, Doctors Otey Miller, C. B. Paddock, A. I. Moore (eye, ear, nose and throat specialist), F. R. Morrow, and J. W. Walker; at Elm Springs, Doctors D. C. Summers and J. W. Fergus, all of whom helped place the medical profession on a high plane. Most of these men have gone to their reward.

It was a co-incidence that Dr. Cargile graduated from Jefferson Medical College in 1876 in the same class with Doctors L. P. Gibson, W. B. Laurence and J. C. Wallis. Each of these men was a pioneer in medical organization in the state, and each was a worthy president of the Arkansas Medical Society. These men were all valued friends of mine.

I wish to make special mention of some of the members of the Washington County Medical Society at the time I became a member in 1885:

Dr. W. B. Welch, the first president of the Arkansas Medical Society, deserves special mention on account of what he did for the early organization of medicine in this state, and what his generosity later did to establish a standardized City Hospital in Fayetteville. Had it not been for his generous cash contribution and his personal efforts, Fayetteville would probably have been without the splendid institution of which we are so proud. The service in alleviating suffering that it has rendered, under the untiring efforts of our much beloved superintendent, Miss Ruth Riley, can never be estimated. Dr. Welch was a man of commanding appearance, a most forceful speaker, a great student, keeping abreast in medical service even in the last years of his life. His military bearing and his somewhat gruff mannerisms did not bespeak the kindly soul he possessed. It was always an inspiration to younger men in the profession to be in his presence. The Arkansas Medical Society placed a bronze tablet in a stone column at the Fayetteville City Hospital to his memory. A volume could be writ-

ten of his worthy achievements as a physician, soldier and citizen.

Much could also be said of Dr. H. D. Wood. His dislike for tobacco and whiskey, and his willingness to express himself in strong terms against their use, can be recalled by many of the younger members of the society. He had two hobbies, the coining of new medical words for Dorland's "Medical Dictionary" and the perfecting of his improved Hodgen splint. He was a grand physician and Christian gentleman and his work in organized medicine was outstanding to the end of his life.

I would be a derelict of duty if I did not make some special mention of the best professional friend I ever had, Dr. A. S. Gregg. Most of you knew him. No one except his recording angel will ever know the great good this man did in his community for nearly sixty years. He not only rendered the highest type of medical service, but, more than that, gave up his substance in **untold** amounts for food and other requirements of his sick and needy patients. One might almost say that no two men like him ever lived in the same generation.

Northwest Arkansas has furnished more medical men as president to the state society than probably any other section of the state. In addition to the first president, Dr. W. B. Welch, then of Cane Hill, later of Fayetteville, they were, Dr. T. C. Hurley, Dr. J. C. Clegg, Dr. J. W. Hays of Eureka Springs, Dr. H. D. Wood, Dr. J. C. Cargile, Dr. Frank B. Young, Dr. W. H. Mock and myself. Except for the elections of Doctors Welch, Hurley and Hays, I think I was at the state Society meetings when these men were elected and enjoyed with them the honor that was bestowed upon them. It was a pleasure during their term of office to watch their efforts to improve the standards of practice and advance the Science of Medicine, in the ultimate hope of extending the span of life and alleviating human suffering, goals which are and should be uppermost in the mind of the real physician.

FOR SALE—Office laboratory incubator, 18x18x18. \$25.00. Write Mrs. Carl G. Davis, 603 Scott Street, Little Rock, Arkansas.

TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

GASTRIC LAVAGE IN ADULTS

FAILURE to find tubercle bacilli in the sputum, even after repeated examination of successive specimens, is no justification for ruling out the possibility of tuberculosis. Least certain of the several methods commonly used is the staining of the direct smear of the untreated sputum. One supplementary method is to examine the stomach washings for tubercle bacilli especially in the case of children who are likely to swallow the sputum. Roper and Ordway advocate its wider use for adults and offer impressive evidence of its value. Abstracts of their article follow:

The examination of fasting gastric contents by smears for tubercle bacilli, first reported in 1898, proved unreliable and the need for culture and animal inoculation was demonstrated. Since 1927 numerous articles have been published regarding this procedure in juvenile tuberculous patients. More recently the test has been used on adults.

This report presents the findings obtained by guinea pig inoculations of fasting gastric contents of tuberculous and non-tuberculous patients. By the addition of this procedure to the usual methods, recovery of tubercle bacilli in tuberculous patients was practically doubled.

The studies were carried out at the Metropolitan Life Insurance Company Tuberculosis Sanatorium, during a three-year period in which approximately 1,000 patients were admitted, of whom 135 were diagnosed as having active pulmonary tuberculosis and the remainder were considered to be non-tuberculous. This afforded opportunity for using controls.

Since 1929 the percentage of minimal cases admitted has almost trebled; in patients with moderately advanced disease it has decreased slightly and in those with far advanced involvement it has declined to one-third the former figure. Yet, the percentage of positive sputum cases has fallen despite the more frequent usage of animal inoculation (from 45.2% in the period 1926-28 to 34.8% in the period May, 1936-May, 1939).

Of the 135 tuberculosis patients of the present study, 34.8% gave positive recovery by sputum examinations alone. The addition of gastric lavage almost doubled this percentage, namely,

63%. (Tables of the findings are described in detail.)

Sharp distinction is made between sputum and fasting stomach contents. Sputum refers to that bronchial secretion which is actually expectorated by coughing or clearing the throat. The gastric specimen contains that bronchial secretion which has gained entrance into the pharynx and has subsequently been swallowed. Gastric lavage was initially employed in children because of their inability to expectorate. By means of this same test in adults, many positives are obtained among those whose efforts to raise sputum are unsuccessful, as well as in many of those producing unsatisfactory or negative sputum.

Sputum produced by the tuberculous patient may contain tubercle bacilli one day and none on the next. The same variability occurs with gastric washings. Stiehm recommends that the test be given on each of three successive mornings.

The test is of assistance not only in the diagnosis but also in the management of the tuberculous patient. After years of treatment the sputum may disappear or become negative, while the gastric contents still exhibit virulent tubercle bacilli.

The procedure of obtaining the gastric specimen causes only slight discomfort to most persons and is not harmful; on the other hand, repeated forceful voluntary efforts to expectorate are uncomfortable and may be harmful. The importance of proving or disproving the clinical and/or roentgenological diagnosis of pulmonary tuberculosis is obvious; and of equal signifi-

cance is the conclusive demonstration of the subsequent disappearance of tubercle bacilli from the bronchial secretions of tuberculous patients under treatment. Knowledge of these facts is of sufficient import to warrant and justify the use

of gastric lavage whenever it is indicated by the absence or negativity of sputum.

Gastric Lavage in Adults With Pulmonary Tuberculosis by Wm. H. Roper and Wm. H. Ordway, *Amer. Rev. of Tuber.*, Apr., 1941.

PNEUMOTHORAX IN PATIENTS OVER FORTY

○ F what value is pneumothorax in patients of middle age? Numerous studies of the results and complications attending artificial pneumothorax have been made but these have nearly all been concerned with patients between the ages of fifteen and thirty-five. Our actual knowledge of the precise merits of pneumothorax in patients over forty is still meager. For that reason a study made of World War veterans in whom pneumothorax was instituted merits attention.

A survey was made of 431 white World War veterans in whom pneumothorax was instituted or attempted after they had passed their fortieth birthday, during a five-year period beginning January 1, 1935. Every one of the patients had a positive sputum and a roentgenographically demonstrable cavity at the inauguration of his collapse program. Eighty-one per cent had far advanced disease; 19% had moderately advanced lesions. The disease process was unilateral in 49.3% and bilateral in 50.7%. Fourteen per cent had at least one cavity whose diameter exceeded 4 cm. The average age was slightly under 44 years—7% were over 50. The duration of the patients' tuberculosis prior to the attempted induction of pneumothorax ranged from one month to 18 years.

Patients with apparently permanent closure of the cavities and conversion of the sputa were classed as "Successful" and these numbered 92, or 20.2%. The "Unsuccessful" numbered 48.7% and the "Impossible" 31.1%. The various complications of artificial pneumothorax occurred with no greater frequency than among younger patients. Death was due directly to the complications of pneumothorax in 5 patients. Sixteen of the patients who died had pure tuberculous empyemata, though it is difficult to estimate the degree in which the presence of intrapleural pus contributed to these deaths, for in all cases pulmonary lesion was actively progressive. Including these 16 cases, the fatalities consequent to complications would number only 21 or 4.9% of the patients treated, about what may be expected in general.

The shorter the time the patient has been ill and the less extensive his lesion, the greater the chances for the success of the therapy and the

smaller the probability of occurrence of empyema. Closure of the cavity is effected earlier in patients whose disease history has been brief, though pleural effusions (a complication of little significance in most cases) are more likely to supervene in persons who have had tuberculosis only a short time.

The time interval of cavity closure and sputum conversion varies directly with the patient's age; most of the pneumothoraces became successful in the latter half of their first year. It seems advisable, therefore, to maintain pneumothoraces of doubtful efficacy for a longer time in persons over forty than would be wise in younger patients.

Bilateral pneumothorax, properly administered in carefully selected cases, is well tolerated and ordinarily occasions no marked respiratory embarrassment. The surgical division of pleural adhesions is necessary to the completion of the collapse in a large number of persons in the fifth decade, just as it is in younger patients.

Weighing the results and the complications, the authors conclude that artificial pneumothorax is of distinct value in the treatment of patients over forty. It is not as effective as in younger persons, but neither is any other therapeutic measure. Thus far it appears that artificial pneumothorax is enduring in its effects in persons over forty, but final conclusions cannot be drawn until most or all patients in the successful group have been observed for a sufficient length of time after reexpansion to permit accurate estimation of the lasting effectiveness of their pneumothorax.

Artificial Pneumothorax in Patients Over Forty by Sidney Diamond and Hubert T. Ivey, *Amer. Rev. of Tuber.*, Apr., 1941.

THE JOURNAL

OF THE

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EDITORIALS

THE 1941 SESSION OF THE AMERICAN MEDICAL ASSOCIATION

The 92nd annual session of the American Medical Association was held in Cleveland June 2nd-6th. With a total registration of 7,269, it is further evident that the housing problem of this annual meeting of American medicine will shortly limit the choice of a place of meeting to some three or four cities. Adequate and complete facilities for the efficient handling of the session are not even available in this many cities.

The scientific and commercial exhibits were leading attractions. New arrangements, in effect this year, added greatly to the attractiveness of the various booths. The scientific exhibit offers the greatest concentrated postgraduate course ever known to medical men. Six small theaters for the projection of motion pictures were provided in areas adjacent to the scientific exhibit and proved a popular innovation. The commercial exhibits were larger and more numerous than ever before and gave the attending physician the opportunity to familiarize himself with the newer methods, equipment and drugs.

The scientific sessions were well-attended throughout and much interest was shown in their proceedings. The new section on anesthesiology justified its existence by an average attendance of over 150. In the general clinical sessions there were special programs on military preparedness and infantile paralysis. All the newer methods in medical teaching, such as panel discussions, roundtable conferences, and the like, were evident in the sections.

The House of Delegates was principally concerned with problems of economic, social and military character, yet interest in scientific advancement was far from being secondary. The delegates voted unanimously to recommend to the Board of Trustees that an appeal be taken from the judgment based upon the verdict of guilty in the recent case of the United States vs. the American Medical Association for violation of the anti-trust law.

The House voted to make the 1942 convention at Atlantic City a Pan-American affair, and representation will be invited from Canada, Mexico, Central and South America, Cuba and Puerto Rico.

Special emphasis was given to the work of the Committee on Medical Preparedness. The recommendation was made that a central authority be established to procure and assign physicians not only for the Army, Navy and Public Health Service, but also for Selective Service and industrial needs. The importance of continuity of medical education to maintain a supply of physicians for all these purposes was reiterated.

The Council on Medical Education and Hospitals was specifically requested by the House of Delegates to take the lead in aiding the work of the various certifying boards in order that they might function primarily for the good of the people and for the advancement of medical science, avoiding the tendency toward the establishment of guilds which now seems to prevail in some instances.

The resolution from the Arkansas Medical Society relative to remuneration for services by physicians engaged in the examination of selectees was unfavorably received by the House of Delegates.

The following members of the Arkansas Medical Society were elected Affiliate Fellows (honorary) of the American Medical Association: A. E. Cox, Helena; E. F. Ellis, Fayetteville; J. C. Gilliam, Des Arc; M. L. Norwood, Lockesburg, and W. C. Russwurm, Helena.

Officers elected are: President, Frank H. Lahey, Boston; President-elect, Fred W. Rankin, Lexington, Kentucky; Vice-president, Charles A. Dukes, Oakland, California; Secretary, Olin West, Chicago; Treasurer, H. L. Kretschmer, Chicago; Speaker of the House of Delegates, H. H. Shoulders, Nashville, Tennessee; Vice-speaker, Roy W. Fouts, Omaha; Members of the Board of Trustees, C. W. Roberts, Atlanta, and E. E. Irons, Chicago. Saint Louis was awarded the 1944 meeting, the House of Delegates having previously selected Atlantic City for the 1942 session and San Francisco for the 1943 session.

PROCEEDINGS OF SOCIETIES

The annual picnic session of the Benton-Washington County Medical Societies was held at Park Springs, Bentonville, July 10th. Speakers were President H. Fay H. Jones, F. Walter Carruthers and Paul Mahoney, all of Little Rock.

The Lawrence County Medical Society was the guest of Dr. H. B. Hull on May 13, 1941, at his office in Mammoth Springs, Arkansas. The meeting was called to order by President Johnson at 3:30 o'clock in the afternoon.

The loss of two friends and fellow members, Dr. J. C. Hughes and Dr. W. J. Robinson, was discussed. A motion was passed and a committee appointed to write a resolution in their honor. Committee members: Chairman, Drs. Tibbels, Henderson and Hatcher.

Scientific papers by Dr. C. F. Calliham; trachoma was discussed by Dr. Elders, and pernicious anemia thyroid by Dr. W. J. Ketz.

A motion was passed to invite X-ray Trailer to Walnut Ridge in June at the home of Dr. Hull for a buffet luncheon.

Members present: Drs. Tibbels, Henderson, Blaine, Elders, Johnson, Kendall, Hatcher and Hull.

Visitors: Drs. C. F. Calliham, W. J. Ketz, C. W. Cooper, N. A. Barnes.

Guests of Mrs. Hull: Messrs. Ketz, Barnes, Cooper, Daniels, Holt, Miller, Dillard, Miss Morts and Mr. Holt.

T. Z. Johnson, M. D., President,
J. B. Elders, M. D., Secretary.

The Lawrence County Medical Society was the guest of Dr. and Mrs. J. C. Land at the Legion Hut in Walnut Ridge on June 10, 1941. The meeting was called to order by President Johnson at 2:30 p. m.

Clinical cases: Arsenical Dermatitis; Reinfecting Syphilis Case, and a case of Tularemia were reported and discussed.

Scientific papers were read by Dr. C. R. Gray who presented a very interesting reading on Cesarean Section. Dr. T. C. Guthrie also gave a good paper concerning Inevitable Abortion.

Dr. Tibbels read the Resolutions of Respect to our deceased members and friends, Dr. J. C. Hughes and W. J. Robinson.

Dr. T. C. Guthrie was elected chairman of medical preparedness committee for Lawrence County Medical Society.

Meeting adjourned to the home of Dr. and Mrs. J. C. Land as dinner guests.

Members present: Dr. and Mrs. C. D. Tibbels, Dr. and Mrs. J. C. Land, Dr. and Mrs. T. C. Guthrie, Drs. Johnson, Merrell and Johnson.

Visitors were Misses Ocrie Melton, Vivian Bachelor and Dr. and Mrs. C. R. Gray.

T. Z. Johnson, M. D., President,
J. B. Elders, M. D., Secretary.

The Pulaski County Medical Society was addressed June 23rd by W. M. Allen, Saint Louis, on "Clinical Use of Sex Hormones."

The Southeast Arkansas Medical Society met at Crossett June 16th for the following program: "Cooperation," H. Fay H. Jones, Little Rock; "Synelectomy in Knee Joint Conditions," F. Walter Carruthers, and "Chronic Cough," Paul Mahoney, Little Rock.

COMMUNIQUE

Fort Bliss, Texas,
July 3, 1941.

To the Editor:

Just finished The Journal of the Arkansas Medical Society and thought I would tell you hello. We are really hard at it, having just returned from an all night road march of thirty hours total duration without lights and cross country. It was lovely. Tomorrow we have a CPX, again Saturday, we have an overnight bivouac, again Wednesday and Thursday, we have a field problem, after that we go for ten days with the 1st Cavalry Division to parts suppressed at present. After that we go to Louisiana for six weeks from a standing start here and after that we are debating whether to take Guam for a rendezvous or retire and return to Arkansas. I am sober but awfully tired so excuse this typewriting.

Stanley M. Gates.

PERSONALS AND NEWS ITEMS

W. A. Thompson recently addressed the Bentonville Rotary Club on "Public Health Problems."

C. C. Reed, Jr., Little Rock, has been appointed deputy coroner for Pulaski county.

F. A. Boomer, Mulberry, has been appointed Crawford county health physician.

MARRIED—On June 29th, Dr. Mary Ruth Brittain, Conway, and Dr. B. E. Pickett, Jr., Carizo Springs, Texas.

Hoyt R. Allen, Little Rock, recently took special work at the Mayo Clinic.

E. Baker has been elected surgeon of the Dermott post of the American Legion.

Ralph E. Weddington, Batesville, has been appointed civilian co-ordinator of public health for the army maneuvers in South Arkansas.

J. E. Little has accepted appointment at Camp Alton, C. C. C., Hope, Arkansas.

The following have been elected in their respective posts of the American Legion: J. B. Hesterly, Prescott, surgeon; L. M. Lile, Hope, surgeon; H. G. Heller, Mena, surgeon, and B. H. Hawkins, Mena, child welfare chairman.

M. G. Lawson, formerly of Benton, has been transferred to Texarkana as director of the Miller County Health Unit.

A. S. J. Clark, formerly of Ozark, has been transferred to Monticello as director of the Drew County Health Unit.

The following officers have been elected by the Alumni Association of the University of Arkansas School of Medicine: President, E. A. Calahan, Carlisle; Vice-president, Estes Allen, Little Rock; Secretary, T. Duell Brown, Little Rock, and Treasurer, Paul Fulmer, Little Rock.

H. E. Murry, Texarkana, R. B. Robins, Camden, and John Wilson, Magnolia, recently took post-graduate work in surgery at Harvard Medical School.

MARRIED—On June 3rd, J. N. Compton, Little Rock, and Miss Margaret Ann Lake, Gould.

A. B. Dickey addressed District 4-A Nurses Association at State Sanatorium June 26th on "Chest Surgery."

L. M. Lile has been elected surgeon of the Hope post of the American Legion.

MARRIED—On June 4th, R. J. Haley, Jr., and Miss Ethel Brewer of Paragould.

Jos. F. Shuffield, Little Rock, was host at a dinner for fox hunters on June 7th.

The following have been appointed as examiners for Selective Service: Desha county, C. H. Kimbro and Gibbs Biscoe; Hot Spring county, W. G. Hodges, H. L. Brown, W. F. Barrier.

L. B. Jones, formerly of Monticello, has been transferred to Ozark and director of the health unit.

K. T. Mosley, who recently completed a course in public health at Harvard University has been assigned as assistant to T. T. Ross in the office of the State Board of Health.

Dr. and Mrs. W. H. Bruce, Pine Bluff, spent a recent vacation touring eastern states.

J. W. Amis, Fort Smith, has been ordered to active duty as Lieutenant-Commander, Medical Corps, U. S. Navy, and assigned to the recruiting office at Salt Lake City.

W. A. Moore has been elected surgeon of the Rogers post of the American Legion.

The following were elected to affiliate fellowship in the American Medical Association at the Cleveland session: A. E. Cox, Helena; E. F. Ellis, Fayetteville; J. C. Gilliam, Des Arc; M. L. Norwood, Lockesburg, and W. C. Russwurm, Helena.

Dr. and Mrs. T. P. Foltz, Fort Smith, spent a June vacation in Mexico.

J. S. Westerfield, Conway, celebrated his 89th birthday June 17th.

The Arkansas Medical Dental and Pharmaceutical Association was addressed at a recent meeting in Little Rock by E. H. White, J. E. Jones, G. W. Reagan, Fred W. Harris, J. S. Levy, R. J. Calcote, W. V. Newman, Sam Phillips and S. C. Fulmer.

James W. Branch has been transferred from Fort Knox, Kentucky, to Fort Ord, California, where he has been promoted and assigned as Commanding Officer, Medical Detachment, 757th G. H. Tank Battalion.

E. J. Easley, formerly of Texarkana, has been appointed director of venereal disease control, extra-cantonment area, at Little Rock.

B. M. Stevenson, West Memphis, has been transferred to the El Dorado Health Unit for the duration of the south Arkansas army games.

J. W. Butts and Geo. R. Storms have been elected surgeons of the Helena post of the American Legion.

H. King Wade has been elected president of the Hot Springs National Park Chamber of Commerce.

O. J. Kirksey, Mulberry, has recovered from injuries received in an automobile accident.

The following have been appointed as psychiatrists for the respective Medical Advisory Boards: Geo. B. Fletcher, Hot Springs National Park, 8, 9, 13, 20 and 22; H. C. Dorsey, Fort Smith, 5, 6, 7 and 17; A. S. J. Clarke, Monticello, 10, 11 and 19; N. T. Hollis, Little Rock, 16; F. G. Engler, Little Rock, 12; John Stathakis, Little Rock, 21; Chas. Arkebauer, Little Rock, 4; and A. C. Kolb, Little Rock, 3.

Benford Hawkins, formerly at State Hospital, Little Rock, has accepted an appointment with the Veterans Administration Facility, Palo Alto, California.

S. A. Drennen, Stuttgart, addressed the North Arkansas Sportsman's Association at Mountain Home June 13th.

Capt. John H. Calley has been transferred from Camp Robinson to Corps Area Headquarters, Omaha.

A. B. Robertson has been elected second vice-president of the Rison Lions Club.

E. J. Horner has been elected surgeon of the Jonesboro post of the American Legion.

O. A. Jamison, Tuckerman, has been elected commander of the Newport post of the American Legion.

Dr. and Mrs. Fred H. Krock, Fort Smith, spent a recent vacation in California.

B. E. Barlow has been elected a director of the Dermott Rotary Club.

RANDOM THOUGHTS OF THE SECRETARY

June 17th. Mrs. Dorrough of the Tuberculosis Association visits and we are well satisfied with the future of this organization and its relations with organized medicine after our conference.

June 19th. To Federal Court we go armed with the roentgenogram of a bit of blasting powder fuse not too certain of our ability to interpret shadows of gunpowder, rayon, asbestos and cotton.

June 20th. This evening busily engaged in assisting with the examination of eighty selectees, Chief Homer Higgins appearing on the scene and passing out compliments to the extent that all of us work unceasingly to show him that we are as good as he says we are.

June 22nd. Comes the account of modernization of the Holt-Krock Clinic with new floors, walls and the like, but more remarkable, of its sound proofing, which causes us to wonder where Chamberlain is now located.

June 23rd. The Ford News brings photographs of the DeSoto celebration at the Spa but astounds us in its reference to Miss Wootton, it still being our information that, despite all the handicaps, she remains Mrs. Euclid M. Smith.

July 5th. We see the Navy's latest addition, Jim Amis, away for acclimatization at Salt Lake City, arming him with propaganda in the form of "Berlin Diary."

July 7th. For the battalion which cannot talk back, we offer husky raspberries to Lt. Gen. Lear with the hope that future convoys can be routed away from the golf courses he is fighting the war on. One more passing thought: What did this disciplinary measure cost the United States?

July 11th. We say our little piece before a conference of educators at Fayetteville this afternoon and renew acquaintance with two legislators, one of whom carries on from the 1941 session-reminding us no end of H. B. 84.

July 13th. With much discussion the Council takes up various matters, departing in a spirit of unanimity over the whole thing, the early hour of adjournment affording us the opportunity to observe the military and the fair sex in interesting farewells at the Union Station.

OBITUARY

JOHN JEFFERSON JOHNSON, age 80 years, died at his home in Harrison June 26th following a long illness. A graduate of the Marion-Sims College of Medicine in 1896, he had practiced in Harrison for 45 years. Active in the affairs of organized medicine, he was elected an honorary member of the Boone County Medical Society and of the Arkansas Medical Society in 1941. He was a member of the Christian Church and had served as examiner for the Pension Board in Arkansas and for the Veterans Administration. Surviving relatives are his wife, one daughter, and three sons, one of whom, Dr. Glenn Johnson, is in practice at Little Rock.

JAMES MEEK SHEPPARD, age 77, died at his home in El Dorado June 9th after an illness of three weeks. Born at Three Creeks, October 15, 1863, he attended the schools there and at El Dorado and later graduated with honors from Peabody Normal School. For some time he taught school and was once superintendent of schools in El Dorado. His medical education was obtained at the University of Arkansas School of Medicine from which he graduated in 1897. On February 25, 1886, he married Miss Amanda Moore, who survives him. Long active in the First Baptist Church, he served as deacon and as chairman of the board of deacons as well as serving on many other bodies of the denomination.

JOHN R. MAY, age 56 years, Little Rock, died of a gunshot wound June 5th. Born at London, August 19, 1884, he graduated from the University of Arkansas School of Medicine in 1908 and practiced until 1933 in Roland. Moving to Little Rock in that year, he had served as assistant superintendent and, until January 1st, as superintendent, of the Pulaski County Hospital. He was a member of the Masonic bodies, including the Scottish Rite and Bendemeer Grotto. Surviving relatives are his wife and two sons.

MEMBERS IN MILITARY SERVICE

Lieut. Commander C. M. Wassell, Naval Station, Key West, Florida.

Lieut. R. F. Hoffman, General Hospital, Camp Robinson, Ark.

Lieut. J. D. Huskins, Fort Benning, Ga.

Lieut. Joe Verser, Camp Robinson, Ark.

Lieut. J. H. Hellums, Camp McQuaide, California.

Lieut. B. Z. Binns, Fort Benning, Georgia.

Major S. M. Gates, Fort Bliss, Texas.

Lieut. Col. Howell Brewer, Camp Robinson, Ark.

Major H. C. Brooke, Camp Robinson, Ark.

Lieut. F. M. Burton, Camp Robinson, Ark.

Capt. M. F. Kelly, Camp Grant, Ill.

Lieut. R. M. Kelly, Fort Bliss, Texas.

Capt. J. D. Johnson, Fort Snelling, Minn.

Lieut. J. W. Branch, Med. Det. 757th G.H.Q. Tank Battalion, Fort Ord, California.

Lieut. W. A. Snodgrass, Jr., Camp Robinson, Ark.

Capt. Van C. Binns, Fort Bliss, Texas.

Lieut. R. H. Johnston, New Orleans, La.

Lieut. Max Hughes, Fort Benning, Ga.

Capt. J. T. Porter, Camp Bowie, Texas.

Capt. O. G. Hirst, Fort Meade, Maryland.

Lieut. John N. Roberts, Navy Medical Corps, Okla. City, Okla.

Lieut. H. D. Fowler, Med. Replacement Center, Camp Grant, Ill.

Lieut. W. B. Harrell, Jr., Replacement Center, Camp Grant, Ill.

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Capt. T. J. Raney, Fort Bliss, Texas.

Capt. J. M. Samuels, Camp Robinson, Ark.

Capt. V. E. Lyons, Company A, 7th BN, Fort Ord, Calif.

Capt. Friedman Sisco, Fort Sill, Okla.

Lieut. Hugh Mobley, Carlisle Barracks, Pa.

Lieut. F. S. Dozier, 140th Regt., 35th Division, Med. Corps, Camp Robinson, Ark.

Lieut. J. F. Jackson, 66th Motorized Division, Fort Benning, Ga.

Lieut. C. H. Finney, Fort Snelling, Minn.

Lieut. Rogers Hederick, Fort Barrancas, Florida.

Capt. L. M. Henry, 50th Pursuit Squadron, Meridian Air Base, Meridian, Miss.

Lieut. A. R. Russell, Fort Riley, Kansas.

Lieut. R. E. Maynard, Fort Crook, Omaha, Nebraska.

Lieut. H. T. Caple, Fort Francis E. Warren, Wyoming.

Capt. Ellery C. Gay, Station Hospital, Fort Leonard Wood, Mo.

Lieut. S. S. Kirkland, 42nd Evacuation Hospital, Fort Leonard Wood, Mo.

Lieut. W. E. Turner, Jr., Fort Leonard Wood, Mo.

Capt. J. H. Calley, Surgeons Office, Federal Office Bldg., Omaha, Neb.

Lieut. Commander J. W. Amis, Naval Recruiting Office, Salt Lake City, Utah.

Capt. W. H. Newkirk, Camp Robinson, Ark.

Capt. J. O. Boydstone, 45th Med. Bn., Camp Polk, La.

The Journal would appreciate corrections or additions to the above list of members of the Society now in active military service.



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THE COUNCIL URGES SUPPORT OF JOURNAL ADVERTISERS

WOMAN'S AUXILIARY PAGE

MRS. RALPH CROSS, Publicity Secretary, Texarkana

In view of their importance to national defense the problems of nutrition are being intensively studied. As a result of the National Nutrition Conference for Defense, the first meeting of its kind ever held on a nationwide scale, which took place in Washington, D. C., May 26-27-28, 1941, America now has a definite, authoritative guide to nutrition and much experimental work is going on.

Dr. R. M. Wilder, of the Mayo Clinic, chairman of the Food and Nutrition Committee of the National Nutrition Council, stated: "It is no longer a question of a few experts in our colleges and research centers talking about vitamins and minerals. What we must now do is to make people understand that nutrition is not an academic matter, but a thoroughly practical consideration concerning every person in the country."

Dr. Thomas Parran, Surgeon-General of the U. S. Public Health Service, said: "Now, for the first time, the United States has definite nutrition recommendations from an authoritative national committee, which has pooled all the available knowledge on foods and drawn a blue print, of the amount and kinds of dietary essentials for good health."

In the annual health essay contest in the Junior High Schools of Texarkana sponsored by the Woman's Auxiliary to the Bowie and Miller Counties Medical Societies, the subject for 1941 was "Health As Our First Line of National Defense." The following is a list of subjects helpful for contestants:

Nutrition in relation to health.

Health education for all, lectures, demonstrations and visual education.

Value of routine physical examination in adults.

The physically and mentally healthy child, pre-school, in school and colleges.

Environmental sanitation, both urban and rural.

a. provision for pure pasteurized, grade A milk.

b. provision for pure water supplies.

c. provision for healthful home buildings.

d. provision for healthful school plants.

e. provision for safe sewage disposal.

Veneral disease control.

Tuberculosis control.

Of the various items mentioned above that may create activity for all our auxiliaries, the question of a balanced food ration for everyone remains paramount, especially since the world crisis we are experiencing disturbs the economic and social level of the whole world.

Mrs. L. H. Lanier,
President, Auxiliary to Bowie and
Miller Counties Medical Societies.

The Southeast Auxiliary met at Crossett and was entertained by the doctors and their wives at Rose Inn where dinner was served. The music was furnished by Miss Roena Phillips who was accompanied by Miss Grace Calhoun. The business meeting was held at the home of Mrs. C. E. Spivey with Mrs. W. J. Schwarz, President, presiding. After our business affairs were put aside, we were entertained at the home of Mrs. Smith, punch and cookies being served. All enjoyed the hospitality shown us while in Crossett.

Mrs. R. F. White, McGehee.

BOOK REVIEWS

Textbook of Pediatrics: By J. P. Crozer Griffith, M. D., Ph. D., Emeritus Professor of Pediatrics in the Univ. of Pennsylvania; Consulting Physician to the Children's Hospital, Philadelphia; Consulting Physician to St. Christopher's Hospital for Children; Consulting Pediatricist to the Woman's, the Jewish, and the Misericordia Hospitals, etc.; and A. Graeme Mitchell, M. D., B. K. Rachford Professor, of Pediatrics, College of Medicine, University of Cincinnati; Medical Director and Chief of Staff of the Children's Hospital of Cincinnati; Director of the Children's Hospital Research Foundation; Director of Pediatric and Contagious Services in the Cincinnati General Hospital. Third Edition, Revised and Reset. 991 pages with 220 illustrations. Philadelphia and London: W. B. Saunders Company, 1941. Price \$10.00.

This edition represents not only a complete revision, but it has been compiled into one volume instead of two, as the previous editions. The previous title, "Diseases of Infants and Children," has been changed to "Textbook of Pediatrics." This volume of pediatrics, which covers the entire field of pediatrics, not only represents a viewpoint of two of the leading pediatricians of the country, but

they had many collaborating authorities to assist them in this volume—each one a specialist in his own field. In the rewriting of this edition, it has been made more concise and more readable for the average practitioner. It, undoubtedly, is the outstanding textbook in the study of children's diseases today. A new chapter has been added which is especially noteworthy in that it concerns growth and development in early life.

Essentials of Dermatology: By Norman Tobias, M. D. Price \$4.75. Philadelphia: J. B. Lippincott Company, 1941.

This book has been written primarily for the general practitioner and medical student, sacrificing microscopic histology and theoretical discussion to some extent.

Differential diagnosis is stressed and the numerous pictures throughout the book emphasize important diagnostic features. Similar appearing lesions are grouped in chapters further facilitating diagnosis.

The chapter on syphilis is one of the outstanding features, with treatment in the various stages of the disease being very complete.

This book should be a much desired book for any medical library.

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No. 4

SINUS DISEASE IS CURABLE WHEN CORRECTLY DIAGNOSED AND PROPERLY TREATED*

VIRGIL L. PAYNE, M. D.

Pine Bluff

In the past few years sinus disease has received so much unfavorable criticism that it is considered by the laity as a dreadful incurable disease. This is due to several factors: 1st, the dissatisfied patient, 2nd, the doctor referring the patient, and 3rd, improper diagnosis and treatment. All three factors can be explained as one. They want a hasty cure from a disease that they have allowed to mature into a chronic state, through not having previously submitted to a complete and thorough examination. This examination includes the necessary laboratory procedures and may tax our diagnostic acumen, to make a correct diagnosis. When this is done, the disease is curable. If the rhinologist is not permitted a fair trial to make a thorough and complete examination of a sinus patient, it is not just to brand sinus disease as incurable. In order to properly diagnose and treat a diseased sinus, we must first know what constitutes a healthy sinus, and to do this we must understand normal sinus development from birth. This is best accomplished by a series of X-rays, for the development of sinus reflects in its morphology the diseases and insults it has encountered. Several authors have shown by roentgenography of the sinuses that they are able to tell the age at which normal development was arrested.

Nature has designed a program of development for the pneumatized spaces of the mastoids and the para-nasal sinuses. Experiences suffered by these parts during their formative period are reflected in their growth and development, and though their normal pattern may be distorted by infection, it may be corrected and reestablished by proper treatment, including surgery.

The Functions of the Sinuses

The nose is the organ of the sense of smell and the ostium of the respiratory tract, which warms, humidifies, filters, and partially sterilizes the air before it enters the lung. The sinuses act as reserve air chambers, they lighten the cranium, supply information as to the state of equilibrium, and build up immunity against infection.

The maxillary sinus is the most constant of all the sinuses and is seldom absent. At birth this sinus is smaller than the tooth bud of a deciduous molar. Starting as a slit-like cavity in the membranous lateral wall of the nose, it continues to grow throughout life by a process of pneumatization and encapsulation. At first the floor of the antrum is above the floor of the nose, but gradually dips below it. The upper teeth, both the deciduous and permanent, play an important part in the morphology of the maxillary sinuses and every effort should be made to have the upper teeth erupt properly so that the maxillary sinuses and floor of the nose will develop normally. Sinuses stunted in their development tend to form chronic sinuses in the older child and adult. It is much easier to cure **an acute infection in a sinus** than a **chronic infection** in one, where the mucous membrane has lost most of its immunizing ability through recurrent infections.

The ethmoidal cells are also present at birth. They are divided into anterior and posterior cells. Those having their ostia inferior to the attachment of the middle turbinate belong to the anterior group, while those having their ostia superior to this turbinate belong to the posterior group. They develop by a process of pneumatization and encapsulation until puberty is well-established, and reflect in their growth the influences of previous infection.

The sphenoid sinus at birth is a cavity situated in front of the sphenoid bone into which it migrates so as to become completely encapsulated in the bone by the age of four years. This sinus often develops to maturity by the tenth year, and as a rule, is the first sinus to reach maximum de-

* Read before the Sixty-sixth Annual Session, Arkansas Medical Society, Little Rock, April 16, 1941.

velopment. Because of this fact it must be considered as a positive factor in the headaches of childhood. The pupils in children dilate during an acute infection of the sphenoid, which is caused by a reflex through the nerves in contact with the sphenoid sinus.

The frontal sinus is formed by the migration of an anterior ethmoidal cell into the frontal bone during the second year of life. Reestablishment of a delayed pneumatization as late as the seventh year may take place, provided that the original process had previously begun, even though arrested for years. The frontal sinus is the best criterion in the study of sinus development for at puberty its diameters are approximately equal, and its culdesac appearance is lost, by the formation of peripheral septae which give it the clover leaf shape. Extreme degrees of pneumatization are not infrequent but are of slight clinical significance. The frontal sinus reflects in its growth the infections and insults it has experienced. Multiple mild infection will arrest its development, and because of the ease with which its growth can be followed, we utilize this observation in our study of the sinuses.

Now that we have a knowledge of normal sinus development we can undertake the diagnosis and treatment of sinus disease. For diagnosis, I have classified the disease under three types:

Allergic-Vaso-Motor Rhinitis
Endocrine
Suppurative or Inflammatory

For treatment, the disease is divided into 5 classes:

Allergic-Serums-Zinc Iontophoresis
Endocrines-Gland Extracts, etc.
Systemic-Luetic
Dental-Surgical and Chemo-therapy
Suppurative-Surgical-X-ray & Chemo-therapy

It is very essential to know whether the pathology in the sinuses is a manifestation of allergy, an inflammatory process, an endocrine dysfunction or a combination of these, in order to arrive at a correct diagnosis. Frequently, this is a hard task, for it requires much painstaking care and persistency on the part of both patient and doctor. Nasal manifestations of allergy have become extremely important to the rhinologist, for those which occur in the upper respiratory tract are the most frequently seen.

In all types a detailed clinical as well as a family history is very essential. A careful examination of the nose with especial reference to posterior, as well as anterior rhinoscopy, color of

mucous membrane, its thickness, the size and appearance of the turbinates, complete blood picture, repeated cytologic study of several nasal smears, roentgenologic study of the sinuses, and finally, a histologic examination of tissues removed from the sinuses and nose. It has been proven that in true allergic, and (vaso-motor-rhinitic) cases, smears made from the nasal secretion show a marked predominance of eosinophiles in proportion to neutrophils. There is a family history of some form of allergy. The mucous membranes lining the nasal cavities are pale and watery and there may be polypoid formation in the meati of the nose. It is this type of allergic sinus disease that, when operated upon, without a thought of making a correct diagnosis, and removing the cause, that gives sinus surgery its black eye. You read of the "Failure of Surgery in Nasal Sinusitis," when the title should have read, "Failure of Surgery in Allergic or Vaso-Motor-Rhinitic Sinusitis." Operating upon such cases, unless there is pus or mechanical obstruction present, has passed just as the giving of a brisk purgative the night before an abdominal operation.

The endocrines also use the nose as a mirror to reflect their dysfunctions. The mucous membrane of the nose is pale and water-logged, and there increased lacrimation of the eyes and a puffiness of the lower lids. Usually these cases are of the hypothyroid type with a basal metabolic rate of minus 10 to 25, and there is usually an associated ovarian, adrenal and pituitary deficiency. The increased lacrimation and water-logging of the mucous membranes is due to a stimulation of the vaso-dilators, which are under the control of the adrenals. The adrenals, in turn, are stimulated by impulses through the autonomic nervous system. Adrenal imbalance is also shown in the low blood pressure and muscular exhaustion upon very little exertion. The palms of the hands are cold and moist. In the female, ovarian deficiency manifests itself in obesity, broad, flat hips with a girdle of fat, scanty and painful menses, and at the menstrual period the nasal symptoms are always worse. Just as there is water-logging of the nasal mucous membrane at this time which may cause polypi by the sagging or prolapse of the edematous mucosa, the fallopian tubes and ovaries may become water-logged, causing pain in these regions, or may even be a causative factor in the formation of uterine polypi. When these endocrine imbalances are cleared up, the nasal polypi diminish and the pale water-logged membrane is changed to a pink healthy tissue.

Systemic—a blood Wasserman should be taken on all cases. The mucosae of the syphilitic nose has a bluish tinge, due to perivascular round cell infiltration, and the large turbinates, persistent stuffiness, over-secretion and frequent colds, in the absence of positive evidence of the sinusitis, lead one to suspect syphilis. Characteristic roentgen findings are the blotchy character of the sinuses.

Suppurative—if streptococci, staphylococci, or pneumococci are cultured from the nose, or sinuses, sulfonamide drugs are given internally. Solutions of these drugs may be also instilled directly into the sinuses.

Dental—In cases where teeth have perforated the floor of the antrum, or molar roots have been broken off in the maxillary sinus during extraction, it is best to remove these roots intra-nasally through a window in the inferior meatus followed by irrigations of the sinus with neo-salvarasan solutions.

Zinc Ionization after the Warwick technique yields very good results in selected cases of allergic sinusitis.

X-ray Treatment—Some authors report favorable results with this treatment in acute sinusitis.

Surgical—In the true infectious type, the neutrophils predominate in the nasal smears. This type may be seen even in very young infants, and unless proper treatment is instituted, may arrest development of the sinuses. The majority of children suffering from sinusitis complain of symptoms not relevant to the sinuses, and only after a thorough examination which includes a roentgenological study, are the sinuses suspected.

As one of the first steps in the examination for sinus disease, I use transillumination as it is a suggestive, although not a reliable means of examination. It is better for unilateral than for bilateral sinusitis. The best results are achieved, however, when used with an X-ray examination of the nasal sinuses. For this purpose we follow the four routine positions, Law, Walters, vertex-chin and lateral. In the persistent infantile sinus, or the proto-type of the acellular mastoid, which is the result of infection, these cells lack resistance. The frontals are absent or rudimentary; the ethmoids are small with thick walls, the floor of the maxillary sinus is high, and the sphenoids are small with thick walls. It has been proven that tonsils and adenoids removed in first few years of life while the sinuses are immature and unable to combat nasal infections, will result in the stunt-

ing of these nasal sinuses and their tendency toward chronic sinusitis in later life. Sinus discharge promotes the **regrowth of the adenoid**, while sinus infection promotes **recurrent otitis media in children**. The pediatrician who usually sees the child with his first bad head cold can do much to prevent sinuses from becoming chronically infected by instituting proper treatment, or if the discharge becomes thick and yellow, referring the child to a rhinologist for drainage. Sinuses grow by the air they receive, and an infection with has arrested this growth cannot be considered eradicated until pneumatization has been reestablished. This reestablishment can only be accomplished by ventilation and drainage, a surgical procedure, which even in allergic sinus disease, is not contraindicated. However, surgery should be thoughtful, vigilant, thorough, meticulous, cautious, and above all, should aim to keep normal physiologic function of nose intact. One axiom of surgery is, wherever pus is found, drainage should be instituted. However, radical sinus surgery is contraindicated in the so-called allergic or vaso-motor-rhinitis cases.

Too often the pediatrician conscientiously ill advises the parents: "Do not have your child's sinuses drained," when he could prevent future chronic sinus infection by advising: "Give those infected sinuses conservative drainage, then determine the causative factor whether it be allergic, endocrine dysfunction, infection per se, or a combination of the above, and remove it." In cases of nasal obstruction due to faulty development or a badly deviated nasal septum, "Physiologic surgery," for the correction of same may do much to prevent sinusitis in aiding nature to rid itself of the disease by allowing proper aeration of the sinuses. In the true uncomplicated sinus infections which follow influenza, prolonged head colds and the like, which give no history of allergic manifestations, personal or familial, nasal smears show a preponderance of neutrophils. X-ray examination of the nasal sinuses reveals cloudy sinuses usually unilateral. It is this type of case that needs ventilation and drainage for which today I make my plea in defense. It is these cases of sinus infection that need drainage procedures before chronicity develops.

After so long a time, the bone becomes involved, osteitis and osteomyelitis result, and now even these cases cannot be promised a cure by surgical procedure. This is the type sinus that due to procrastination is the true "Once a sinus always a sinus," but could have been cured had proper treatment been instituted early in the disease.

So in closing, gentlemen, may I suggest that you study these cases carefully, each of its own type, for they are as different as the colors of the rainbow, and advise treatment, when indicated, before the "Sun has begun to set."

Conclusions

1. The time to cure sinusitis is in childhood.
2. Acute sinusitis is more readily cured than a chronic sinusitis.
3. Allergy is no contraindication to surgery.
4. Haste has no place in the diagnosis and treatment of sinus disease.
5. Patience and persistency on part of doctor and patient are needed.
6. Surgery has a definite place in treatment of sinusitis.
7. Sinus disease, when correctly diagnosed and properly treated, is curable.

COMMUNIQUE

With 206th Coast Artillery, Camp Murray, Washington, near Fort Lewis, Washington, vicinity Tacoma, Washington, below Seattle, Washington, en route Unalaska (see Atlas) through sea channels to Siberia hence to Berlin.

To the Editor:

Your nostalgic card arrived just as I hit Tacoma with the 206th C. A. (of whom you have heard) and also with a degree or two of fever caused by some wandering streptococci that found lodgment in my throat. We are here till the 11th, and then on to glory and victory, etc. This is a madhouse here but with the able help of T. J. Raney, R. M. Kelley and C. H. Reagan we are carrying on. It seems a far cry from the good old days of a two weeks encampment to this really serious business of going into war. The good Chaplain is his usual self. Geo. Tilley, Ben Sain and the rest are all up and at them. Bernie Hargis is ill in Station Hosp., Fort Lewis. Send my Journal to Mrs. Gates at Monticello.

The address of this regiment is:

Major Stanley M. Gates, M. C.,
206th Coast Artillery,
c/o Postmaster, Seattle, Washington.

Sincerely yours,

Stanley.

SIGNIFICANCE OF COUGH AS A SYMPTOM*

O. C. MELSON, M. D.
Little Rock

Cough is a symptom of many different conditions. Also, there are many different kinds of cough. In this discussion, our object is to show how observation of the cough may assist in the diagnosis of the underlying cause.

Coughs have been variously classified. There is the dry cough without sputum, the productive cough associated with the raising of sputum, the hacking cough, the raucous cough, the strident, the brassy, or hoarse cough. With respect to time, coughs are classified as persistent, spasmodic, or paroxysmal. Coughs may also be classified as useless or useful. This latter classification is one which perhaps has not been sufficiently stressed. Patients presenting themselves with cough invariably wish the cough stopped and not infrequently the physician feels it his duty to accomplish this without estimating the value of the cough.

Most coughs are thoracic, perhaps even pulmonary, in origin. That is, the reflex is set up from impulses arising in the lungs, trachea, the bronchi, or the higher sensitive regions when irritating secretions reach them. However, coughs may be associated with lesions high in the respiratory tract, in the central nervous system, or the stomach.

I do not propose to run the gamut of respiratory tract diseases with the idea of pointing out the type of cough associated with each. This, as Sherlock Holmes would say, is elementary. I am reverting to the classification of useful and useless coughs to remind you that sometimes coughs are to be encouraged and promoted; for instance, the dry cough of an early bronchitis. The mucous membrane is undergoing a stage of engorgement, it is irritated and tender. Like the ripening of an abscess, the process can be helped but not eliminated. When the stage of secretion appears, the cough becomes loose. Sputum is removed from the bronchial tree, and thus is the patient relieved of his pulmonary irritant. In a bronchitis when the stage of secretion arrives, the patient is entering upon the road to recovery. This is the kind of a cough to encourage unless it becomes too productive or persistent.

Because of an educational program carried out over a number of years, the medical profession is rather aware of the significance of cough in tu-

* Read before the Sixty-sixth Annual Session, Arkansas Medical Society, Little Rock, April 14, 1941.

berculosis. It is the most common focal symptom of this disease, and when it occurs in a patient, persistently with or without sputum, tuberculosis should always be suspected. The cough may be hacking, persistent or paroxysmal. Last autumn, a patient came in because of a cough which he had had for six weeks. It was of a hacking nature, and his chief concern was that it kept him awake at night. He said there was no sputum, he had no fever, his appetite, strength, weight, and energy had not been impaired. However, examination of the chest physically and by X-ray with analysis of the sputum proved that the cough was caused by a rather extensive tuberculosis infection. This is not an uncommon occurrence but illustrates the necessity of following up the symptom of cough to an ultimate diagnosis rather than dismissing it with a cough mixture.

For a number of years, I have observed patients complaining of a dry, hacking, persistent cough coming on following an upper respiratory infection. It may be present for several weeks, and is usually aggravated by the patient lying down on the back. There are no systemic symptoms, no sputum. The cough keeps the patients awake. Examination of the chest, nose, throat, and sinuses are negative. The nasopharyngeal mucosa is thickened and boggy, and the application of astringents and mild antiseptics locally relieves the cough. Whether it is purely reflex from irritation of the nasal mucosa such as we see when cotton is gently rubbed on the lining of the aural canal, or whether there is a minute amount of secretion which irritates the bronchial tree lower down, I am not certain. Whatever the mechanism of its production, the remedy is simple and sure.

A condition which is assuming more importance in medical diagnosis of chest lesions is bronchogenic carcinoma. It is most common in persons over 40, and should be kept in mind in patients complaining of a dry barking cough. The cough is unproductive at first, but if abscess or bronchiectasis is associated, a purulent sputum is raised. In some, the sputum is mucoid. Many develop a hemorrhagic sputum. Signs of atelectasis may be detected in the chest on physical examination, but the best method of diagnosis is by bronchoscopic examination.

In the same breath we can mention metastatic malignancy from the breast, kidney, or other primary source. One would be more apt to keep it in mind if the original tumor has been removed surgically. Occasionally, the metastases

produce more symptoms than the primary tumor. The cough is persistent and dry in the beginning, but may be accompanied by foul sputum if the tumor mass in the lung degenerates.

The chief characteristic of the cough of bronchiectasis is its tendency to occur in spasms or paroxysms. In the early stages, it may be dry and irritating. This is the type of cough which may do irreparable damage to the bronchial tree or to the lung tissue. The increased intrapulmonary pressure produced before the glottis opens stretches those portions of the bronchi which have suffered damage to the elastic fibres in their walls. Thus the disease progresses, the dilatations of the bronchi become larger, and more cavity like. The increased secretion stimulates additional cough and in no time a vicious circle is set up that is more formidable than the seemingly endless coils of Nazism. Change of position, stooping, exercising, laughing, and crying may initiate a paroxysm. The early morning paroxysm of productive cough with fetid sputum is quite characteristic of the bronchiectatic who has progressed beyond incipency.

In the same way, this vicious circle may prevent the healing of cavities in tuberculosis. It may cause the gradual progression of pulmonary emphysema by tearing down the interalveolar divisions. It adds fuel to the fire in pulmonary hemorrhage.

Such a cough is obviously useless so far as the patient is concerned. The secretions must be eliminated but it is necessary to do this with a minimum of damage to the lung and bronchi. If patients are instructed to cough with the glottis open, the cough is little more than a forcible exhalation. By means of posture, the forces of gravity may be applied to the evacuation of the secretions.

Cough is a respiratory tract symptom but the underlying cause is not always in the respiratory tract as indicated previously. It is a primary and common symptom of heart disease. The importance of cough in the chronic non valvular heart affections is not so important but in those associated with pulmonary stasis it very definitely becomes outstanding. It is a relatively late sign of pulmonary congestion. Characteristically, it may occur in single coughing episodes or in long paroxysms. Physical effort aggravates the cough of chronic heart disease. Nocturnal paroxysmal cough may be a forerunner or an accompaniment of nocturnal paroxysmal dyspnoea. In hypertensive patients where the left ventricle is chronically insufficient, the chronic increase of bronchial

secretions produces a constant, annoying cough which is most disturbing at night. This may precipitate an attack of so-called cardiac asthma. In general, the cough of chronic pulmonary congestion is usually dry but with increasing congestion and irritation the sputum may be white and frothy. When acute pulmonary oedema occurs the sputum is profuse, frothy, and hemorrhagic. Pericardial affections are frequently accompanied by a short, irritative, nonproductive cough because of pressure on the bronchi or trachea. Another mechanism of production of the cough in heart disease may be pressure on the recurrent laryngeal nerve. The left recurrent laryngeal nerve loops around the aorta and the right loops around the subclavian. If the pulmonary artery becomes dilated and the blood pressure in the pulmonary circuit is elevated as in mitral stenosis or aneurysm, the nerve is pressed upon and alteration of the cord movement occurs. The cough then becomes brassy or hoarse. Physical effort usually aggravates the cough of chronic heart disease. Pressure directly upon the trachea or one of the main bronchi also alters the sound of the cough and helps to produce the characteristic cough of aneurysm.

Mediastinal tumors of all sorts may give rise to this same characteristic cough. Pressure produces the hoarse, brassy or strident cough which is almost pathognomonic. It may be paroxysmal with or without sputum. This sputum may be mucoid, bloody, or hemorrhagic. If the tumor happens to be a dermoid, fragments of tissue, hair, cartilage, or teeth may rupture into a bronchus, and be expelled.

Any discussion of cough would be incomplete without reference to the "allergic" cough. This is exemplified by the persistent cough following the common cold. It recurs each winter and diminishes in the summer. Usually patients with this type of cough have had repeated colds or attacks of influenza. This explanation must be considered especially if the cough is spasmodic or is associated with asthma.

Chronic tonsillitis may be a frequent cause of cough. Here the impulses originate in the pharyngeal mucosa, and the resulting response is a dry, recurrent, irritating, hacking cough. If there is an associated post nasal or sinus infection, there is a varying amount of thick mucoid sputum, but it is usually not profuse. This sputum usually is expectorated on change of position.

In spite of all efforts, there are still many instances in which the cause of cough is uncertain. These patients should report periodically so that repeated investigations can be made to arrive at

a definite conclusion. The possibility of tuberculosis must be first determined because it is the greatest single cause of chronic cough. Heart disease ranks second in the production of cough. In any individual 40 years of age or over with an intractable cough, bronchogenic carcinoma must be the first possibility to be considered.

RETURN YOUR INFORMATION CARD FOR THE DIRECTORY PROMPTLY

About September 1st, an information card will be sent from the headquarters office of the American Medical Association to every physician in the United States and Canada. The information secured is to be used in compiling the Seventeenth Edition of the AMERICAN MEDICAL DIRECTORY.

The directory is prepared at regular intervals in the Biographical Department of the American Medical Association. The last previous edition appeared in 1940. This volume is one of the most important contributions of the American Medical Association to the work of the medical profession in the United States; it has been especially valuable in the medical preparedness program. In it, as in no other published directory, are dependable data concerning physicians, hospitals, medical organizations and activities. The directory provides full information concerning medical colleges, specialization in the field of medical practice, memberships in special medical societies, tabulations of medical journals and medical libraries and, indeed, practically every important fact concerning the medical profession in which any one might possibly be interested.

Before filling out the information card, read the instructions carefully. Physicians are especially urged to state whether or not they are on extended active duty for the medical reserve corps of the United States Army and Navy. Fill out the card and return it promptly whether or not a change has occurred in any points on which information is requested. If a change of address occurs before March 1, 1942, report it at once. Should you fail to receive a card before the first of October, write at once to the headquarters office stating that fact and a duplicate card will be mailed.

COMING MEDICAL MEETINGS

Tenth Councilor District Medical Society, State Sanatorium, September 9th.
Tri-State Medical Society, El Dorado, September 23rd-24th.

HISTORY OF THE ARKANSAS MEDICAL SOCIETY

Compiled by the Committee

Frank Vinsonhaler, Chairman, Little Rock; M. L. Norwood, Lockesburg; E. F. Ellis, Fayetteville; Robert Caldwell, Little Rock; W. T. Wootton, Hot Springs National Park; H. Moulton, Fort Smith; J. M. Lemons, Pine Bluff; E. E. Barlow, Dermott; D. A. Rhinehart, Little Rock; W. H. Mock, Prairie Grove; L. J. Kosminsky, Texarkana; F. O. Mahony, El Dorado; M. E. McCaskill, Little Rock; Geo. B. Fletcher, Hot Springs National Park; O. J. T. Johnston, Batesville; S. J. Wolfermann, Fort Smith; A. S. Buchanan, and H. T. Smith, McGehee.

A HISTORY OF THE GARLAND COUNTY— HOT SPRINGS MEDICAL SOCIETY

W. T. WOOTTON, M. D.
Hot Springs National Park

The early history of the Garland County—Hot Springs Medical Society is so intimately associated with the protracted fight waged against doctor-drumming (or fee-splitting) that one cannot be fairly reviewed without reference to the other, therefore this resume will largely be a recapitulation of the war on drummers as waged by members of this society.

Prior to the organization of a county society here, a few members of the local fraternity saw the advantage alliance with organized medicine offered in prestige and politics and consequently became members of the Pulaski County Medical Society and made infrequent trips to the Capital City to attend meetings. They also used their membership and the state contacts it gave them to laud it over newcomers in the valley who were not so fortunate in their friendships and quite frequently worked this racket to the undoing of an otherwise rival practitioner. Organized medicine to these silk-hatted, frock-coated gentlemen meant politics only, the survival of the fittest politician.

It was some years later that the local profession was sufficiently augmented to have a society of their own and it is deplorable that all such early records were destroyed in the several catastrophic fires visited on Hot Springs National Park.

It is related by the old timers, and appears in the written stories of the pioneer days in Hot

Springs National Park, that even in those days the doctor who received favorable mention, who was actually recommended to the visitor by the hotel proprietor, paid for such services either at so much per month or through a percentage basis per patient. So it would appear that doctor drumming was one of the earliest industries in the valley.

It would seem that fee-splitting between surgeon and internist or family physician would be sufficiently culpable to bring down the wrath of all morally disposed physicians, but the nefarious, conscienceless doctor-drummer in Hot Springs, National Park went outside the profession to split his fee. He paid the hotel manager, the clerk, inside man (who posed as a patient), and any other runner who could deliver a patient to his office. Naturally professional ability to treat satisfactorily whatever disease the patient was afflicted with did not enter into the arrangement. The doctor's ability to extract money from that patient and his record for square shooting, a fifty-fifty division of the spoils and no holdout, was the necessary evidence of his honesty and the criterion that brought in the work.

Drumming, as we knew it, was practiced by hotel proprietors, clerks, inside men (who sat around lobbys and pretended to be patients) bath house clerks, druggists, rooming house proprietors, hack-drivers (later taxi drivers). In fact, it is even now hard to tell just where the line was drawn between those who were and who were not influenced in their recommendation of physicians by a hidden material consideration.

If a prospective patient did not approach the hotel proprietor or his inside man quickly enough, seeking information relative to the best medical service procurable, they made the approach on him and it was masterful in its suavity and convincing as to necessity for the employment of one and only one particular doctor for a condition such as the one from which the sufferer sought relief. "Was not this doctor known throughout the states as the greatest specialist for this disease that the world had ever known." Of course, the patient was not aware that the gentleman's specialty changed with each disease the new customers might have.

At times a patient would appear with a letter to a reputable physician from either some other doctor or a former patient. In the event the manager or hotel runner had difficulty in persuading the prospective patient away from the doctor to whom his letter was addressed he would take him into a saloon and introduce him to some

EDITORIAL NOTE: This is the eighth installment of the preliminary draft of a History of the Arkansas Medical Society. Subsequent issues will contain additional sections of the history as now prepared. The Committee will welcome suggestions or additions which the membership shall care to present.

drunken bum as the doctor he was seeking. After that the sick man would willingly go wherever his steerer advised. A few doctors actually divided fees to the extent of buying their own patients only. This they readily confessed at the "clean up."

The practice of wholesale doctor-drumming in Hot Springs National Park started with the advent of a certain doctor locally known as "the spider," who was not content to meet competition, as it then existed, or wait to become known professionally. On the other hand, he was inordinately jealous of the reputations and rewards that had accrued to those who had given the best of their knowledge and experience to the alleviation of the sick who had come to Hot Springs National Park seeking relief. He outbid his drumming rivals and contacted every source that might deliver a victim to his web. When other unsuccessful physicians saw this newcomer start right off with a paying practice they were not long in discovering his method and at once proceeded along the same lines.

It should be remembered that at this time there was no basic science law, there was no state medical law of any nature whereby the state recognized the right of one and denied the right of another to practice medicine. All one had to do in Garland county was to convince the county judge one was a pretty smart fellow and the judge would give him a permit to hang out a shingle. He need not be a graduate from a medical college, in fact, a great many of those practicing here were not. This county judge method of registering doctors continued until a state law became effective in 1903, and with it a state licensing board.

It was in this same year that, through the initiative of the Hon. Martin A. Eisele, then superintendent of the Hot Springs Reservation, and still our leading citizen, a rule was promulgated by the Department of the Interior to the effect that each and every doctor who sought the privilege of prescribing the Hot Springs baths must first be registered with the department as qualified professionally and morally. It was then thought that through the instrumentality of registering the various doctors in residence that a control over their method of procuring patients would be had.

The Secretary of the Interior therefore created the first Registration Board in 1903 and appointed as members Col. Blair Taylor, then Commanding Officer of the Army and Navy General Hospital; Dr. G. C. Greenway and Dr. C. Travis Drennan. It became the duty of these three doc-

tors to establish the first registered list of physicians who were authorized to prescribe the Hot Springs waters for bathing.

Prior to this time the only effort made to curtail the drumming-doctor was that of the City Council in passing an ordinance prohibiting it. This ordinance was totally ineffective and left each man as a guardian of his own rights. A great many of the practitioners of that day took this guardianship rather seriously and never appeared unarmed. It was not uncommon to see eight or ten "guns" (.38 and .45 caliber pistols) casually stacked on a table as the owners participated in a surgical operation as interested spectator or assistants.

To the Indians, the Valley of Vapors was peaceful ground, but not so to the drumming-doctors. Their war-like spirit flamed into a raging fury when this first Registration Board attempted to weed out incompetents, nongraduates and moral degenerates. Detectives were assigned to the duty of guarding the lives of these gentle, law-abiding doctors who had suddenly been thrust into the midst of threats against their lives, mutilation and other dire consequences. These gentlemen soon found this atmosphere so abhorrent to their mode of life, their inclinations and sensitive feelings, that they resigned in a body. The second board was headed by that patriarch of the Hot Springs profession, Dr. William H. Barry, who feared neither man nor devil. With him was Dr. W. T. Wootton, a young man recently from the army, and the third member was a lawyer, Mr. Charles S. Greaves. This board was given the authority of a trial court and proceeded to weigh evidence pro and con in every instance where information was furnished to the effect that a doctor was procuring his patients in an illegitimate manner. The only punishment they could meet out, however, was to strike the names of those convicted from the list of those allowed to use the government-owned hot water. The guilty could still drum for patients and when necessary tell the patients they did not need the baths or even that they might prove harmful.

The next step was to secure passage of a state law with penalties more likely to deter the inclination to procure a practice the easy way. So came into the code the Gantt Law which provides that anyone found guilty of drumming or fee splitting shall automatically have his license to practice medicine revoked.

Then came a long drawn out effort to secure evidence sufficient to convict in court. After the passage of the Gantt Act the Federal Registration Board ceased to be a trial board, for

the department then would strike from the list only those convicted in open court and the board has since remained as an examining board. The personnel has changed comparatively little since the second board went out of existence through death and resignation. At present (1938) Drs. A. H. Tribble, Leonard R. Ellis, Geo. B. Fletcher, W. M. Blackshare and Col. Wm. Moncrief compose the Registration Board.

From the inception of the fight to rid Hot Springs National Park of the drumming-doctors to 1917, not less than forty thousand dollars were expended in an effort to procure information against the guilty that would stand up in court and very little was accomplished. This money was raised in voluntary subscriptions by doctors of sterling character who could never be induced to deviate from the high standard of ethical conduct that had been imbued in them during their scholastic terms and as laid down in their Hippocratic oath.

Though they were in the minority, they were persevering and never gave up hope that the practice would finally be eliminated, consequently they did everything within their power and within the purchasing power of their money to curb this practice, one that stigmatized one and all who practiced medicine in Hot Springs National Park.

It was not until 1917 that the propitious moment for a general clean-up arrived and it was then that some of the known to be trustworthy members of county society got together and prevailed on a committee of three, William H. Deadrick, A. H. Tribble and W. T. Wootton to make another attempt to convict those now openly violating the anti-drumming laws. No questions were to be asked the committee, no reports expected, and finances would be forthcoming.

This committee immediately contacted a lawyer, Mr. William G. Bouic, who knew all the "angles," and the final glowingly successful outcome was largely due to his indefatigable efforts and scorn of the threats of death visited daily upon him and the individual members of the committee.

Through Mr. Bouic, the lawyer who represented the drumming element in Hot Springs National Park, was approached and for a consideration agreed to have a dictaphone installed in his office with wires running to an adjoining office where a Burns detective and a stenographer were domiciled.

For three days the lawyer held a succession of interviews on the drumming situation with his clients, all of which conversation was taken down in black and white. Then the lawyer had business in Little Rock and during his absence an associate "found" the dictaphone. Within a very short time the entrance to that building, the stairway and all available space was worse than a bedlam. It was estimated by "old timers" that there were more guns to be seen (or nearly seen) at that corner than had ever been seen at any period even of the Civil War. It was miraculous that the Burns man and his stenographer got out alive but they did escape, possibly because they were not recognized as being party to the ruse.

This evidence, in reality a series of confessions, was then laid before Judge Scott Wood who was presiding over the Garland County Circuit Court, and who was known to be consistently opposed to immorality in any form, and considered the traffic in human health as especially obnoxious. Judge Wood at once stated he would turn over his grand jury for a full investigation of the drumming situation and hear as many witnesses as the committee could muster.

This was done. Some twenty or thirty vultures, known as "inside men" or "hotel runners" were questioned before the Grand Jury and then a halt was called. Their testimony before the grand jury was then checked with their dictaphone testimony and when a discrepancy was found a perjury indictment was issued and arrest followed. Then the Grand Jury grind was resumed. Information and confessions began to pour in so rapidly that no malefactor knew where he stood or who had given information against him. Drummers and drumming-doctors alike knew that it was worth their life to be seen in conversation with a member of the committee, as a consequence Mr. Bouic would often sneak a doctor or a hotel manager or clerk into the home of a committee man in the middle of the night that his confession might be heard and whatever leniency, short of that probable jail sentence then pending, was sought in the trade. Some of the committee members were even busier hearing confessions than was the priest.

Twenty-eight doctors, some of whom were members of the Garland County Medical Society, were found guilty of buying patients. Only one trial was held in open court. It was necessary to scour the country to recapture the key witnesses. One man was spirited out of town with a gun in his ribs practically all night. This man was later located in New Orleans by the

anti-drumming committee, arrested, and secreted in the Charity hospital until needed to testify in Hot Springs. He was brought back in due time and domiciled in the Arlington hotel with two trustworthy detectives. Efforts were made all through the night to gain entrance to his room or attract him to the window where he would furnish a target for the squad of killers on the outside. He lived to give direct testimony of receiving money from the doctors on trial for having sent him patients. After his testimony the memory of a number of others was happily restored and when the testimony was all before the court the case was iron clad. All the others plead guilty and sought mercy. As a concession to those who plead guilty it was agreed by the committee with the sanction of Judge Wood that sentence would be suspended as long as the convicted remained out of the state of Arkansas. In the meantime nearly one hundred and fifty men who had made their living by lying to the sick visitor and in other ways cajoling him into the "spider's web," fled for parts unknown.

In twenty years that have passed since "the big clean up," sporadic attempts have been made by a more or less desperate few to again resume the practice but they have found public sentiment now as strongly opposed as it was apathetic in days of old and their efforts have soon ceased.

There can be little or no doubt that the highly successful outcome of the 1917 fight was due to the fact that our Circuit Court was at that time dominated by such a staunch and incorruptible character as Judge Scott Wood and that the anti-drumming committee received such efficient aid and direction as afforded by attorney W. G. Bouic.

It is a notable fact that the machinery of this county medical society was so occupied with its political and moral questions that no thought of scientific studies were vaguely considered. Each and every meeting was good for at least one clash between the forces pro and con on drumming, so interest, speculation, and attendance were always at a peak. Not until after "the big clean up" did the members settle into a state of composure permitting of thoughts conducive to better medical knowledge. Scientific meetings then superceded the political gatherings, a unity of purpose pervaded the profession, and today the drumming evil is an historical nightmare that only a few old timers can visualize as having been the cause of so much discord, hatred and actual intent to murder.

From the Garland County Hot Springs Medical Society there have been three men elected to the presidency of the Arkansas Medical Society, Drs. C. Travis Drennan, W. T. Wootton and George B. Fletcher.

Dr. William H. Deaderick gained wide recognition as author of a medical work on malaria and Dr. M. L. Lautman for his book on arthritis.

Drs. Greenway and Garnett were favorably known in every corner of the United States. For many years it was customary for each of them to see more than a hundred patients a day in their offices, day after day.

It was the genial Dr. E. H. Martin who first introduced a clinic in Hot Springs National Park and many of his former associates are still in practice here.

Practically every specialty is represented among the practitioners of Hot Springs National Park and many of these specialists rank among the first of any community.

From an absolute dearth of scientific meetings the members of the society, who are also members of the several hospital staffs, now have one such meeting regularly each week.

The early history of organized medicine in Garland county is emblazoned with such names as Greenway, Garnett, Gaines, Keller, Dake, Ellsworth, Barry, Thompson, Hay, Drennan, Holland, Williams, Collings, Vaughn, Minor, Hebert, Jelks, Mount, Short and of their descendants and successors.

The importance of having the physician prescribe the proper diaphragm is stressed in a booklet, addressed to pharmacists, by the Holland-Rantos Company entitled "The Pharmacist Looks At Contraceptives."

The Holland-Rantos Company are the pioneers in advocating the diaphragm plus jelly method and have consistently maintained that diaphragms must be properly fitted by physicians.

This monograph is the latest promotion done by the company in its advocacy of "The Physician's Method."

The Physicians Casualty Association of America has made a reduction in the \$25.00 per week accident and health insurance, of \$1.00 per year; in the \$50.00 per week accident and health insurance, of \$2.00 per year; and in the \$75.00 per week accident and health insurance, of \$3.00 per year.

TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

FINDING TUBERCULOSIS AMONG COLLEGE STUDENTS

TEN YEARS AGO no more than a dozen school health administrators were actively seeking out tuberculosis among the students in colleges and universities, despite the acknowledged predilection of the tubercle bacillus for those of this age group. Today 248 institutions of higher learning have some form of program for the finding of tuberculosis on the campus. The Tenth Annual Report of the Tuberculosis Committee of the American Student Health Association is both a record of progress and a reminder of what is still to be done.

The colleges and universities of the United States and Canada are becoming increasingly "unfair to tuberculosis!" They are showing that they recognize an obligation to safeguard and improve campus health and the present report of the Tuberculosis Committee relates action such as no previous report has recorded.

For the academic year of 1939-40, 248 colleges had some form of tuberculosis control, an increase of about 50% over the preceding school year. Necessarily, where a movement is gaining new adherents annually, the character of individual programs varies greatly. There are still 629 colleges with no program but about 30 of these hope to initiate one this year. Although 402 schools neglected to return the questionnaire sent by the Committee, there were 193 additional replies this year. In spite of this, six states have failed to report a single collegiate tuberculosis program.

The duties of the Committee fall into three divisions: first, the presentation to interested schools of the most approved outline of workable institutional tuberculosis case finding; second, the active encouragement of interest in case finding; and third, the collection, analysis and publication of statistical data secured from colleges taking part in the national survey.

Since the statistical data collected by the Committee are submitted by many people and accumulated under widely differing conditions, some are open to criticism so the report figures are indicative of trends rather than mathematical pronouncements.

The procedure is to mail questionnaires early in May to cooperating schools and a follow-up is

sent in October when necessary. Nothing is asked which would require the keeping of complex records. The form requests the name and enrollment of the college, number of positive reactors to tuberculin, tuberculosis cases discovered and their disposition, and the number of students tuberculin tested and X-rayed elsewhere than on the campus. Similar data are requested on non-student tuberculosis. Returns are divided by sex. The reverse side contains questions as to procedure which, in general, can be answered by a check mark. The recommended technics are plainly underlined. A duplicate copy of the questionnaire is sent for the use of the health officer of the institution.

This year questionnaires were sent to 20 colleges and universities in Canada. There is no Canadian student health association and so frequent have been the requests for information that it was decided to circularize these colleges. Several fine programs are already under way in Canada.

More colleges have discovered this year that a relatively simple system suffices to keep track of tuberculin testing, negative and positive reactors, X-ray results, etc. It is essential that those conducting health work know, at any time, the exact status of their effort and the result.

The Committee agreed that tuberculin testing is a prime prerequisite to a tuberculosis case-finding plan and believes that only thus can all infected students be identified. The Committee recommends the annual re-testing of all negative reactors since the initial infection occurring in a young adult may produce an unpredictable clinical sequence of events. Where hazards of

infection are heightened, as in nursing, medicine, dentistry, practice teaching, etc., more frequent testing is indicated.

The Committee recommends that only reliable tuberculin be used and that a positive reaction to the tuberculin test be succeeded by a good chest film. Where possible, the fluoroscope should be used as a supplement to the film.

In Table I data from 166 colleges are compiled because their figures seemed satisfactory in quality. The continued shrinkage in positive reactors seems to indicate a national decline in childhood infection.

TABLE I
Tuberculin Testing of American College Students

Year	Total No. Tested	Per cent Positive
1932-33	14,318	35.0
1933-34	25,184	30.3
1934-35	26,861	29.4
1935-36	31,601	30.0
1936-37	56,224	27.3
1937-38	64,232	25.8
1938-39	82,774	25.5
1939-40*	123,389	25.4

* Reliable returns only.
The results of the survey in cases found are condensed into Table II.

TABLE II
Cases of Pulmonary Tuberculosis
Diagnosed Among College Students 1939-40

A. In institutions with some tuberculosis control program		
B. In institutions with no tuberculosis control program		
	A.	B.
Clinically active cases diagnosed*	292	21
Apparently arrested cases diagnosed*	345	14
Withdrawals due to tuberculosis	273	25
Old cases back in school	338	23
Institutions reporting	248	227
Approximate total enrollment	490,000	200,000

* Generally recognized criteria of activity were specified.
Using only the active cases for comparison, it is seen that such cases were turned up with much greater frequency in Group A. It is fair to presume that these cases were found early, often pre-clinically, instead of late and with marked signs and symptoms, which proves again the importance of early diagnosis.

Educators are sensing the urgency that animates an enlightened citizenry intent on eliminating every preventable disease. The ultimate aim of the Committee is to report that in answer to their questionnaire, every American college has

replied: "We **have** a modern tuberculosis control program, and tuberculosis will not catch this college or any of our students napping."

Tenth Annual Report of the Tuberculosis Committee, American Student Health Association, 1939-40 by Charles E. Lyght, M. D., Chairman, *Journal-Lancet*, April, 1941.

New frontiers in surgery and medicine will be discussed by 17 nationally known medical leaders for the benefit of physicians and surgeons of Oklahoma and surrounding states at the eleventh annual Conference program of the Oklahoma City Clinical Society here October 27-30. An attendance of 1,000 is expected for the four-day educational program.

From a modest beginning in 1930, this clinic inaugurated by the profession in the state's capital city, has grown with the backing of physicians throughout Oklahoma until it is now rated as one of the important annual medical programs of the nation. Indications are that every county in Oklahoma will be represented in the attendance with sizable delegations coming from Southwestern Kansas, Western Arkansas, Northern Texas, New Mexico, Colorado, Missouri and Louisiana.

Dr. Fred W. Rankin, President-elect of the American Medical Association will head a list of national medical notables on the program which includes Dr. Walter C. Alvarez, Rochester; Dr. A. Bruce Gill, Philadelphia; Dr. L. Emmett Holt, Jr., Baltimore; Dr. Verne C. Hunt, Los Angeles; Dr. Howard T. Karsner, Cleveland; Dr. Francis E. LeJeune, New Orleans; Dr. Perrin H. Long, Baltimore; Dr. John H. Musser, New Orleans; Dr. Alton Ochsner, New Orleans; Dr. Earl D. Osborne, Buffalo; Dr. E. D. Plass, Iowa City; Dr. Wendell G. Scott, St. Louis; Dr. Albert O. Singleton, Galveston; Dr. Fred J. Taussig, St. Louis; Dr. Gilbert J. Thomas, Minneapolis, and Dr. Henry P. Wagener, Rochester.

The annual Clinic dinner and dance given by the Oklahoma City Chamber of Commerce, complimentary to visiting physicians and honoring the President-elect of the American Medical Association, will be held October 28. Principal conference sessions will be held at Hotel Biltmore daily from 9 a.m. to 5 p.m., announces Dr. Basil A. Hayes, President of the sponsoring Oklahoma City Clinical Society.

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EDITORIALS

HEALTH NEEDS OF ARKANSAS YOUTH

In 1940, the National Youth Administration established a nation-wide health program. Its purpose was to make a physical survey of youth on NYA projects and to classify these youth for more intelligent assignment according to physical and mental abilities. As a corollary of the program, youth were to be encouraged to make efforts in securing correction of remediable defects on their own initiative, with the cooperation of their parents and by assistance of health and welfare agencies.

In Arkansas the program is co-sponsored by the Arkansas State Board of Health which has freely given of its facilities in all phases of the endeavor. An advisory board has been appointed consisting of Dr. W. B. Grayson, representing the Arkansas State Board of Health; Dr. S. J. Wolfermann, representing the Arkansas Medical Society, and Dr. I. M. Sternberg, representing the Arkansas Dental Association. The program of physical examinations was approved by the Council of the Arkansas Medical Society on January 12, 1941. The National Youth Ad-

ministration has shown the most cordial spirit of cooperation at all times since the inauguration of the health program and has evidenced a commendable desire to be guided by the professional advice of the physicians and dentists of Arkansas. The entire program is the culmination of plans originally presented by Administrator J. W. Hull of Arkansas. Examinations have been conducted by teams in various centers over the state and over 3,000 youth have received complete and thorough physical examinations to date. Laboratory studies have included blood serology, urinalysis and feces examinations for intestinal parasites. Tuberculin testing, a part of the examination, has not been generally carried out because of administrative difficulties.

Analysis of tabulations of the first 1,161 completed examinations in Arkansas is of interest in evaluating the health needs of Arkansas youth in the age range 17 to 25. Youth have been examined from the following counties: Arkansas, Benton, Boone, Carroll, Crawford, Franklin, Independence, Jackson, Johnson, Madison, Newton, Pope, Sebastian, Washington and White.

The health status classification is standard throughout the nation. Class 1 means fit for any work or athletic activity; no defects present or only very slight defects. Class 2 means fit for any work or athletic activity. Abnormal conditions present can be corrected by proper measures which may be medical, dental or by special exercise or diet. Class 3 means fit for almost any kind of work or recreational activity. This includes minor defects not thought to be amenable to correction but not severely handicapping. In this case, the physician indicates the work to be avoided, or specifically approves the work assignment given to the youth. Class 4 means fit for only certain kinds of employment or recreational activity. Here, too, the physician must approve the assignment and state whether there is necessity for medical supervision of the youth during employment. Class 5 means temporarily unfit for employment or recreational activity. Classification in class 5 means subsequent reclassification after termination of the temporary period of unemployability. Class 6 means permanently, or for a prolonged period, unfit for any employment of recreational activity. These classes I to 6 cover, by careful grading, all youth from those in perfect health to those unfit for any activity.

Of the records tabulated from Arkansas, but 57 youth were placed in class I. Other classifications were: Class II, 723; Class III, 158; Class IV, 94; Class V, 119, and Class VI, 2. However, of the 723 placed in class 2, there were 687 who

were in need of dental care, a large number of whom had no other defect. Of 1,161 youth examined, only 182 did not have caries of the teeth, while 979 had one or more carious teeth.

1,119 youth of 1,139 had negative blood serology; 8 were doubtful (one test), and 12 were positive (one test). 935 of 986 had negative feces examinations; 23 cases of hookworm disease were found, and there were 28 other cases of intestinal parasite infection.

107 of 1,161 youth had never been vaccinated against smallpox while 200 had never received typhoid immunization. 238 had never consulted a physician while 516 had never been to a dentist. Malnutrition was recorded in 180 youth; organic heart disease was found in 43; bronchial asthma was a finding in 4; pleurisy was noted in 6; bronchitis was present in 20. Strangely, no case of active tuberculosis was discovered in 1,161 youth.

The National Youth Administration, through this program of health education and physical examinations, has made possible the detection of defects among youth in Arkansas. A cooperative spirit between the National Youth Administration and the profession of Arkansas urging correction of the remediable conditions found will assure the future health of these youth.

THE NEW DISEASE

American physicians must prepare to cope with a new disease. It is becoming generally prevalent and may reach epidemic proportions and severity. It is contagious, and attacks all without discrimination, including those who fill the ranks of the trades and the professions.

By virtue of their training, their ethics, the nature and the demands of their profession, doctors are especially susceptible to the contagion. Until it is better named, the new disease can be called "War Fever." The future effectiveness of American Medicine and the future status of the American doctor will be determined by the extent to which individual physicians are successful in immunizing themselves against the hysteria which is a symptom of and which always accompanies the disease.

The world is at war. One hundred and thirty million Americans are very much a part of this world. It is a wholly new kind of war. In times past, material advantage and territorial gains provided the incentive for wars of aggression. This is a war of ideological conquest. Material advantages and territorial gains are merely incidental to the larger purpose. It is an all-out

warfare, spending lives and treasure on a scale never before contemplated or even imagined by man.

In the present situation there are too many uncertainties to enable either the wisest or the best informed reasonably to predict the extent to which it may be necessary to sacrifice the lives and material resources of this country in order to win this war. It is a known fact—and it should be faced—that we are in the process of mobilizing all of our energies and utilizing all of our resources for the accomplishment of this purpose.

It is almost needless to say that no group will be called upon to make a greater contribution than will be expected from the medical profession. It is needless to say that this contribution will be gladly, cheerfully made by American physicians. American doctors do not expect any special credit for the important service they are rendering or will be called upon to render. Their tradition, their training and experience make this attitude inevitable. Many are already enlisted for the duration. The rest will be ready when called.

However, the greatest national danger lies in the possibility of these doctors becoming victims of the "new disease." On them rests a new and most vital responsibility. It is of the utmost importance that these physicians ever keep in mind that the war itself is one of ideologies; that our first obligation and most difficult task is to preserve the Priceless Heritage of the American People that has set them over and above and apart from all the other people in the world. It is desirable to consider carrying the "four freedoms" to all the people in the world. But,—it is essential that we maintain our own independence and freedom of action,—"for what shall it profit a man if he shall gain the whole world and lose his own soul?" It is our task now to "hold fast that which is good."

Tomorrow will come the peace. While we unselfishly and unlimitedly serve, we should make sure that the stifling control of bureaucracy is not permanently established. We should take steps to insure the preservation of the sacred doctor-and patient relationship, the independence of the physicians, the continued progress of American Medicine and the safeguarding of the public interest.

Medicine's planning and administrative agency in these fields is the NATIONAL PHYSICIANS' COMMITTEE FOR THE EXTENSION OF MED-

ICAL SERVICE, Pittsfield Building, Chicago, Ill. It has demonstrated both its reliability and its effectiveness. In these times of increasing stress it should have the allegiance and financial support of every patriotic practicing physician. If your county association has not appointed an official committee to cooperate with N. P. C., it should do so at the next regular meeting.

EDITORIAL COMMENT

INFRACTIONS OF THE MEDICAL PRACTICE ACTS

The State Medical Board of the Arkansas Medical Society has considered the employment of funds derived from annual registration of its licentiates as provided by the 1941 legislature and contemplates vigorous action toward prosecution of all violations of the medical practice acts of Arkansas. Obviously, the Board cannot go into the various counties and conduct separate investigations of all alleged violations but the Board does assure county medical societies that it will earnestly cooperate with them in all such matters. County societies which are concerned with violations in their districts are advised to consult with the Board in order that the full benefits of the registration law may be made effective.

PROCEEDINGS OF SOCIETIES

The Lawrence County Medical Society met at Portia, August 12th. A. G. Henderson read a paper on "Morphine." J. A. Martin was elected to membership. Following the scientific session, those present were the guests of Dr. and Mrs. W. J. Robinson for a watermelon feast.

J. B. Elders, Secretary.

The Lawrence County Medical Society met at Hardy, July 8th, as the guests of Dr. and Mrs. W. W. Brown. The following scientific program was presented: "Heart Disease," Paul Gray, Batesville, and "Fractures of the Neck of the Femur," L. A. Buell, Batesville.

J. B. Elders, Secretary.

Announcement is made that the Tri-State Medical Society will meet in El Dorado September 23rd-24th instead of Texarkana as originally announced.

PERSONALS AND NEWS ITEMS

"Arrhenoblastoma" by Fred H. Krock and S. J. Wolfermann, Fort Smith, appeared in the July issue of Annals of Surgery.

J. Q. Blackwood, Helena, is taking special work in public health at Johns Hopkins.

Dr. and Mrs. D. W. Goldstein, Fort Smith, spent a July vacation in Texas and Louisiana.

M. E. Foster, Fort Smith, spent a July vacation in Wyoming and Colorado.

B. C. Routon recently addressed the Ashdown Rotary club of "Heart Disease."

T. P. Foltz, Fort Smith, recently addressed the Noon Civics Club of that city on "Mexico."

Frank Vinsonhaler, Little Rock, addressed the Chidester Masonic lodge June 24th.

Fred H. Krock addressed the Fort Smith Lions club recently on "Hospital Facilities."

E. E. Estes has been elected president of the Fordyce Country club.

L. T. Evans has been elected treasurer of the Batesville Rotary club.

L. L. Hassell, Conway, has been transferred to Nashville for duration of war games.

John L. Ruff recently addressed the Searcy Kiwanis club on "Public Health."

The John Grace Memorial Baptist Church, a memorial to the late Dr. John Grace, was dedicated at Belleville June 29th.

Additional appointments to Medical Advisory Boards are: I. R. Johnson, Blytheville; S. W. Douglas, Eudora; E. B. Swindler, T. S. Van Duyn, Stuttgart; J. B. Hesterly, Prescott; I. H. Erwin, M. L. Harris, A. M. Elton, Newport; T. F. Kirtrell, L. H. Lanier, Texarkana; J. W. Butts, Geo. R. Storm, H. H. Rightor, Helena; J. A. King, Elaine; C. E. Dungan, Augusta; J. A. Bogart, N. G. McCown, J. S. Davidson, Forrest City; N. E. Fraser, C. H. Dickerson, Conway; S. N. Doane, C. C. Townsend, Arkadelphia; W. W. Chamberlain, Hot Springs National Park; R. R. Kirkpatrick,

Texarkana; Jim McKenzie, Hope; T. Z. Johnson, C. C. Townsend, Walnut Ridge; J. W. Ryburn, Pocahtontas.

Merl Crow, formerly of Pine Bluff, has moved to Warren where he will be associated with Drs. M. T. and Bruce Crow.

H. King Wade and D. B. Stough have been appointed to a committee for organization of a boys club at Hot Springs National Park.

B. D. Luck, Sr., Pine Bluff, has been elected to fellowship in the International College of Surgeons.

B. P. Briggs, Little Rock, has been appointed acting medical director of the Crippled Children's Division, State Department of Public Welfare.

"Anuria for 96 Hours in a 2-Year-Old Child Following Sulfapyridine Therapy" by Carl L. Wilson and C. B. Billingsley, Fort Smith, appeared in The Journal of the American Association, July 26th.

In error the following members were omitted in the list of physicians now serving in the military forces: Frank R. Burton, Allyn R. Power, Hot Springs National Park, and Fount Richardson, Fayetteville.

The following have been elected post surgeons of the American Legion: J. F. Halbrook, Morrilton; W. J. Hunt and Rufus Martin, Warren.

L. F. Barrier, Little Rock, has been elected chairman of the Board of Control for the McRae Sanatorium.

R. V. McCray, Malvern, has been called to active service with the army medical corps and assigned at Fort Leonard Wood, Missouri.

Howard A. Dishongh, Little Rock, will participate in a round table discussion at the National Association of Coroners in Chicago, September 15th.

L. R. Ellis, Hot Springs National Park, has been appointed District Deputy Grand Exalted Ruler, B. P. O. E.

R. B. Robins, Camden, has been elected to the Board of Governors, Lions International.

John W. Dorman, Dyess, has been in active service as Lieutenant, Medical Corps, United States Army, and assigned to Camp Robinson.

G. P. Slaughter has been added to the staff of the State Board of Health as field consultant in obstetrics.

J. L. Bean has been elected surgeon of the Lincoln post of the American Legion.

W. A. Grimmett has been elected surgeon of the Blytheville post of the American Legion.

Dr. and Mrs. J. M. Stewart, Van Buren, spent a recent vacation in Tennessee.

D. A. Dickerson has moved from Gurdon to Caraway.

Dr. and Mrs. S. J. Wolfermann, Fort Smith, spent an August vacation in Wisconsin and Colorado.

Fred H. Krock, Fort Smith, has been promoted to the rank of Lieutenant-Commander, U. S. Naval Medical Reserve Corps.

Ralph Crigler has been elected president of the Lambda Chi Alpha alumni at Fort Smith.

Drs. H. Fay H. Jones and Paul Mahoney, Little Rock, with their families, spent an August vacation in North Carolina.

OBITUARY

SIDNEY HARRIS, aged 74, died at Pansy, July 28. Born at Blanchard Springs he had lived in Cleveland county for the past twenty years. In addition to his membership in the Cleveland County Medical Society and the Arkansas Medical Society, he was a member of the Baptist Church and of the Masonic lodge. During the World War, he served as a captain in the Army Medical Corps. Surviving are his wife and a son.

AN'S AUXILIARY NEWS

R. ALPH CROSS, Publicity Secretary
Texarkana

May we urge that each Auxiliary member be active in Red Cross work—knitting, surgical dressings, or sewing, for the British. Bowie and Miller county have specified one day a week as Auxiliary Day. Let us all do our part.

Dr. L. H. Lanier has returned from a stay in Kansas City, Missouri, and Rochester, Minnesota.

Dr. and Mrs. Hugh Longino are in New Orleans, Louisiana.

Dr. and Mrs. Decker Smith and sons, Decker and Kay Kay, and Mrs. Smith's mother, Mrs. Lilly McDaniel, have returned from a visit to Mexico City and Acapulco.

Dr. and Mrs. L. P. Good and children, Dorothy and Dean, have gone to Myrtle Beach, South Carolina, for a visit.

Mrs. J. T. Robison has returned from Waxahachie, Texas, where she taught a course entitled "A Christian Imperative" by Roswell P. Barnes, of the Presbyterian Statewide Women's Conference at Trinity University Building.

Dr. and Mrs. Roy Baskett have motored to Topeka, Kansas, and Spokane, Washington.

Dr. and Mrs. Allen Collom and daughter, Mary Maddox, have returned from California and Houston, Texas.

Mrs. William Hibbitts has been studying choir music at Northwestern University, Chicago.

GOOD HEALTH

He whose blood is red, whose muscles are hard, whose sleep is sound, whose digestion is good, whose posture is erect, whose nerves are steady has a good bank account in life—he possesses that which contributes to happiness, to accomplishment, to service, to society, to state and to country.

—Calvin Kendall.

RANDOM THOUGHTS OF THE SECRETARY

July 16th. This morning conferring with the National Youth Administration over medical and hospital care for youth on resident projects, departing Russellville pleased with prospects for the plan. In the evening to Krocks, where Fred celebrates his natal day, personally broiling steaks to a fine turn, turning the celebration into a festival for all of us. The feminine interest in the scientific report on arrhenoblastoma promises that each medical husband will go into details when home is reached.

July 18th. The boy in Crigler asserts itself once too often and his instruction in diving comes more than a cropper, his nose and chin wiping off the concrete bottom to the Lake Fort Smith pool.

July 19th. Visiting and dining with the Chamberlains now camped in the royal suite of a local inn, Bill Arnold providing an item for heated discussion. Our contribution is the proof that rainbow trout are more tender than blue ribbon beef.

July 25th. With the break of day heading north to breakfast at Neosho, lunch at Saint Joseph, whence the

Pony Express once traveled, and on to Sioux City, where we dine. Crossing the muddy Missouri into South Dakota, we finally stop at Vermillion, the home of the state university. This must be the country's prize homeowner's town as there is a most limited choice of accommodations for the night. Of the two available, we certainly chose the worse.

July 26th. Crossing South Dakota, tarrying at Mitchell to view the Corn Palace, an unique building decorated with multi-colored ears of corn and grain. From Pumpkin Center (there is such a town), the terrain stretches from level plains to rugged, butte-studded ranch land, the highly-developed farming land of the east with its large barns merging into livestock ranches with smaller barns but with wider hats more in evidence. In the afternoon into the Badlands National Monument, a most appropriately named place, where wind and water have combined to erode a plateau into thousands of bizarre architectural creations, colored in delicate tints, horizontally spread, of rose and cream. To make our visit all the more realistic a sand storm wipes out the glorious sunshine of our first half-hour and is, in turn, followed by a torrential downpour as we slowly make our way out of this supernatural region in search of what we are pleased to term "civilized haunts," where, in this instance, sunshine and summer weather again greet us.

July 27th. In the Black Hills with Rapid City as our home station, a tourist center of magnitude. In the past two days we have seen cars from 39 of the states including a lonely Ford on the Dakota prairies whose tag bears the legend "Opportunity Land." To Rushmore Memorial where the "faces," as they are called locally, of Washington, Lincoln, Jefferson and Teddy Roosevelt, are taking form on a high granite slab. We have no fault to find if this be the tourist attraction it appears to be, but the cost would have fed every cow in South Dakota through all the drought years when we saw so many of them down in Southeast Arkansas, where grass was plentiful if sculpture was not.

July 30th. Departing the Black Hills country, all of whose attractions have been observed by us, we pass through Deadwood, where once Deadwood Dick, Wild Bill Hickok and Calamity Jane acted their parts; Lead, pronounced different from what you think; into Wyoming, where a cowboy astride a bucking broncho greets you from enameled markers at the state line, and thereafter from license plates, newspapers and most everything else. Taking a few worth-while miles off the highway to stand at the foot of the massive 600-foot mass of grey rock whose fluted sides give rise to most entertaining legends, named, in support of the apparent desire of this section to frequently refer to the satanic realms, Devil's Tower. To Sheridan, a shaded community given over to dude ranching activities in addition to more prosaic cattle-raising.

July 31st. Entering Montana today with time out to really visit Custer's last stand where small stones mark the spots at which lone troopers met death from an overwhelming force of Sioux braves, marking, as we review the occasion, a complete failure of intelligence and communication in the command. During the day seeing much of Montana and in late afternoon topping the Red Lodge scenic highway to Yellowstone, now our recommended entrance, to slumber peacefully in revived Cooke City, once a ghost town, but even now in great need of a railroad to move the ore.

August 1st. Entering Yellowstone where the youngster almost immediately sees antelope which he stalks, with amateurish diligence, for the purposes of photography. The bear population shows that birth control has not been practiced since our visit in 1929 and tonight we watch 40 odd grizzlies partake of bear salad back of the lodge.

August 2nd. In the geyser basins today, rewarded by eruptions of those erratic performers Rocket, Grotto, Lion and Riverside, as well as Old Faithful and the more dependable ones. In wild animals we see deer and the unusual sight of two cow moose with calves.

August 3rd. Continuing about the Park observing more of its varied wonders, its volcanic phenomena, its colored pools, its truly beautiful Lower Falls, its tinted hillsides, its island-dotted lake in forested mountains, its wealth of flowers and grass and shrubs, a region which arouses more than any of which we have knowledge, the sense of Nature's mysteries.

August 4th. Passing through the Teton range and the Jackson Hole country yesterday, not the section as Wolfermann says, where fishermen wear tuxedos, but a last frontier in the real sense where the mail comes in winter by dog sled. Down the western boundary of Wyoming finding that Freedom enjoys the distinction of Bristol, Va.-Tenn. and Texarkana, Ark.-Tex., but with less town to support its business district divided between Idaho and Wyoming. Across Idaho's southeast corner around noon, too far to visit the Krock ranch and confirm or deny his tales. Thence to Utah, many a Mormon settlement behind us, not to mention the chinchilla farm, whose habits are nocturnal and should Bob Robins wish one for a pet, we can supply the address and the additional information that one little rabbit can be had for \$1,800. On to Salt Lake City where we find Lt. Cmdr. Amis most loquacious and eager to see Arkansawyers again.

August 5th. As tourists will, we take the youngsters to Salt Lake where they float, but the naval representative, Amis, remains ashore, permitting us to note that the beach is in great need of a laundryman.

August 6th. To Bryce Canyon, which the Indians called "red-rocks-like-men-sitting-in-a-bowl-shaped-canyon," an apt descriptive term although ignoring some thirty to forty other tints. With no imaginative process, it becomes easy to identify Snow White and the Seven Dwarfs and a thousand other figures gently eroded from stone along the walls of the canyon in myriad colors. Adjectives which come to mind in an attempt to describe Bryce are weird, grotesque, bizarre; yet these seem most inadequate as one takes lingering looks at the domes, spires and temples and their predominant colors of red, pink and cream with every conceivable intermingling of tints. The impression of an ancient workshop with many sculptors with gigantic size and ambition, defeated by the very splendor of their undertakings, seems not too far-fetched. Maurice Howe has so vividly described it: "Bryce—a sunset petrified!"

August 7th. To Cedar Breaks, cut from the same geological formation as Bryce, yet 2,000 feet higher and carved on larger proportions, lacking the lacy fretwork and intricate mazes of Bryce, but surpassing with its massive Gothic walls. To Zion in the afternoon which is entered on the canyon floor rather than along the rim as at Bryce and Cedar Breaks and for which we feel a more kindred spirit than for Bryce or Cedar Breaks.

Give us every time these deep, narrow-walled, dark-hued, vertical canyon walls, which here and there, recede into amphitheaters and are decorated with arches, towers and pilasters. To one and all it suggests cathedrals and temples, so it is small wonder that its stupendous spectacle, an amazing monolith of creamy-white, the Great White Throne, is so named, and that others are called West Temple, East Temple, Angels' Landing and the like.

August 8th. Entering a state for which we confess ardent admiration, Arizona, last night, we stay in the Kaibab Forest seeing its unique animal, found nowhere else in the world, the white-tailed squirrel, and enjoy "Uncle Billy's" sourdough biscuit which we would like Shanklin up Indiana way to try once. Through the Navajo reservation today, a region which amply illustrates the lack of generosity of this government with its Indian wards. Of the Grand Canyon we are permitted to obtain but three vistas due to another heavy rainstorm and we roll along down Wickenburg way.

August 9th. Taking an unnecessary drink of the Hassamapaya well at Wickenburg which, legend says, "those who drink here never tell the truth again," we move on to Tucson where one exiled Fort Smithian, Don Andrews, and two visiting home towners meet us for an exchange of gossip from the Arizona and Utah borders and plains for that from the Cherokee strip section.

August 10th. Detouring to visit Tombstone, "The Town Too Tough To Die," affording an hour of interest in seeing the Bird Cage Theater, another Boothill Cemetery, the Can-Can Restaurant, and many another oddly-named establishment of that day.

August 11th. At El Paso, our expectation of visiting the 206th thwarted by the military necessity of sending this premier fighting unit to the northwest (see communicate from its medical major).

August 13th. Walking five long miles in Carlsbad Caverns, a not-to-be-forgotten trip, but we will make no bids for its repetition. Impressive is the ceremony at the Rock of Ages but more materialistic to the 664 in our party is the efficient manner in which lunch is served 750 feet underground.

August 14th. Starting at Clovis, New Mexico, we successively cross a section of Texas and the entire state of Oklahoma, to remove bags and impedimenta (for the last time) at the home station this night, 5,200 miles of vacation motoring happily and pleasantly traveled.

What the National Defense really requires in the form of new or improved devices for medical care is a matter on which military authorities—not social reformers should be consulted.—Creighton Barker, M. D., executive secretary, The Connecticut State Medical Society.

A physician is an unfortunate gentleman, who is every day called upon to perform a miracle, namely, to reconcile intemperance with health.—Voltaire.

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BOOK REVIEWS

A Primer for Diabetic Patients: By Russell M. Wilder, M. D., Ph. D., F. A. C. P., Professor and Chief of the Department of Medicine of the Mayo Foundation, University of Minnesota; Head of Section on Metabolism Therapy, Division of Medicine, The Mayo Clinic. Seventh Edition, Reset. 184 pages. Philadelphia and London: W. B. Saunders Co., 1941. Price \$1.75.

This is a most excellent primer which can be read advantageously both by the physician as well as the deeply interested diabetic patient. It is beautifully arranged for the diabetic by the simple definition of diabetes, the urinalysis test, the types of insulin and methods of use, the complications of diabetes, diet and food facts, and the definite questions set out to be answered by the reader.

This brief, inspirational primer will help every diabetic patient assist his physician as well as himself.

The American Illustrated Medical Dictionary: A complete Dictionary of the terms used in Medicine, Surgery, Dentistry, Pharmacy, Chemistry, Nursing, Veterinary Science, Biology, Medical Biography, etc. By W. A. Newman Dorland, A. M., M. D., F. A. C. S., Lieut.-Colonel M. R. C., U. S. Army; Member of the Committee on Nomenclature and Classification of Diseases of the American Medical Association; Editor of the "American Pocket Medical Dictionary." With the Collaboration of E. C. L. Miller, M. D., Medical College of Virginia. Nineteenth Edition, Revised and Enlarged. 1647 pages with 914 illustrations; including 269 portraits. Flexible and Stiff Binding. Philadelphia and London: W. B. Saunders Company, 1941. Plain, \$7.00. Thumb-Indexed, \$7.50.

The nineteenth edition of this library companion of physicians throughout the country retains its attractive appearance, convenient size, authoritative background, and general usefulness as have the previous editions. It is an essential to the practice of medicine; the first book in any library.

The Mask of Sanity: By Hervey Cleckley, B. S., B. A. (Oxon.), M. D., Professor of Neuropsychiatry, University of Georgia School of Medicine. Pp. 298. Price \$3.00. Saint Louis: C. V. Mosby Company, 1941.

In this volume the author presents the manner in which the true status of the patient, whether sane or insane, has been determined. The book will be of interest to those physicians who are especially interested in the problems of personality study.

X-ray Treatment of Chronic Arthritis: By Karl Goldhamer, M. D., Associate Director, Quincy X-ray and Radium Laboratories, Quincy, Illinois. Pp. 131. Illustrated. Price \$2.00. Quincy, Illinois: Radiological Review Publishing Company, 1941.

This volume records the author's experience of twenty years in the treatment of the condition both in this country and abroad. All phases of the disease are covered and illustrations serve to further demonstrate the viewpoint of the text.

Abdominal Surgery of Infancy and Childhood: By William E. Ladd, M. D., F. A. C. S., Professor of Child Surgery at Harvard Medical School; Chief of Surgical Service, The Children's Hospital, Boston; and Robert E. Gross, M. D., Associate in Surgery, the Harvard Medical School; Associate Visiting Surgeon, The Children's Hospital; Associate in Surgery, The Peter Bent Brigham Hospital, Boston. 455 pages with 268 illustrations. Philadelphia and London: W. B. Saunders Company, 1941.

This is a volume of children's surgery involving the abdomen and is written with the intention of "developing better methods of examination, more detailed pre-operative and post-operative care and a more specialized and delicate operative technique." The description of the embryology and anatomy involved in congenital atresia and stenosis of the intestine and colon is given so lucidly that the points to be examined at operation can be quickly located. Many cases of obstruction can be better taken care of after reading the chapter on malrotation of intestines as a cause of obstruction. Congenital anomalies are described in detail. Many practical points as to non-operative treatment are given. An excellent discussion of X-ray diagnosis is included. A section on post-operative care is given at the end of each operative description.

A Textbook of Ophthalmology: By Sanford R. Gifford, M. A., M. D., F. A. C. S., Professor of Ophthalmology, Northwestern University Medical School, Chicago; Attending Ophthalmologist, Passavant Memorial and Cook County Hospitals. Second Edition, Revised. 470 pages with 215 illustrations. Philadelphia and London: W. B. Saunders Company, 1941. Price \$4.00.

This text is written by an expert for general practitioners and students of ophthalmology. Dr. Gifford presents in a concise manner the essentials of ophthalmology, stresses examination of the eyes, diagnosis of the more common eye conditions, and therapy. This is a completely revised second edition brought up to date with the latest developments and treatment found in the current literature.

PERSONALS AND NEWS ITEMS

W. G. Eberle recently addressed the Fort Smith Rotary Club on "Selective Service Physical Examinations."

W. H. Abington has been elected surgeon of the Beebe post of the American Legion.

Glenn Johnson, Little Rock, has been elected chief of staff at the University Hospital.

Dr. and Mrs. O. L. Melson, Little Rock, spent an August vacation in the New England states.

W. L. Sadler, Little Rock, spent a recent vacation in the Western states.

Dr. and Mrs. C. J. Steed, Gurdon, spent an August vacation in Arizona.

Ira Ellis has been elected surgeon of the Monette American Legion post.

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UNILATERAL RENAL DISEASE ASSOCIATED WITH HYPERTENSION * †

CARL L. WILSON, M. D.
Fort Smith

Although more than one hundred years have passed since Bright first suspected that arterial hypertension was related to kidney disease, the problem of hypertension still confronts the medical profession as well nigh insolvable. The pathogenesis of high blood pressure on the basis of generalized arteriolar spasm or constriction has been well established and the clinical distinction has been clearly made between benign and malignant forms of the disease. Nevertheless, the problem of hypertension has continued to vex attempts at its correction, and the profusion of medical remedies recommended for its treatment is clearly-defined evidence that no medication is efficacious. It is fair to say that in the great bulk of the cases, medicine has had little to offer the hypertensive patient except amelioration of symptoms and an attempt at staving off the inevitable vascular accidents with their crippling sequelae and ultimate death.

It is generally felt that arteriolar disease of the kidneys is responsible for the origin of hypertension, and that the probable mechanism is a persistent reduction in blood flow to the functioning units of the kidney. Arteriolar sclerosis has not been produced experimentally, but a close approximation to the results of this pathology has been accomplished by reducing the size of the renal artery until a constant renal ischemia appears. To Goldblatt, Page and others belongs much of the credit for the concept that renal ischemia produces hypertension. Much experimental data have accumulated during the past decade to verify these original findings.

It is now a firmly established experimental fact that partial constriction of the renal arteries in dogs will produce permanent elevation in blood

pressure. The type of hypertension depends on the degree of constriction of the renal arteries. When constriction is not great there is moderate hypertension with little or no diminution in the renal function. This is similar to the benign hypertension seen in humans. When constriction is severe, the resulting hypertension is pronounced and is accompanied by damaged renal function which may be severe enough to cause death in uremia. This resembles malignant hypertension. Thus, examples of benign and malignant hypertension can be produced in dogs at the will of the experimenter and are entirely dependent upon the degree of ischemia produced.

Various neurosurgical procedures have been performed in an attempt to correlate hypertension with a nervous mechanism. To the present date these results have not been convincing. Various abdominal sympathectomies, renal denervations, adrenalectomies, etc., do not interfere with the production of experimental hypertension, and if performed after the hypertension has been firmly established, these procedures do not strikingly effect the blood pressure level. It may be said without serious disagreement that the bulk of the experimental work indicates that the mechanism of hypertension is primarily humoral and of renal origin. Further authority for this statement may be seen in the fact that an ischemic kidney from a hypertensive dog when transplanted into the neck of a nephrectomized animal will produce hypertension after a circulation has been established. Removal of this transplant will allow the restoration of normal blood pressure.

While the humoral theory of hypertension carries the most weight, the exact mechanism of its action still remains a matter of debate. In a general way it may be stated that a substance

* Read before the Sixty-sixth Annual Session, Arkansas Medical Society, Little Rock, April 15, 1941.

† From The Holt-Krock Clinic Department of Urology.

called renin is present in extracts from normal kidneys. This combines in some unknown manner with another substance present in the blood plasma and this union produces a highly active pressor substance. The normal kidney also elaborates a second substance which is anti-pressor in action and may be called renin inhibitor. During health a perfect balance exists between these antagonistic substances and a normal blood pressure range results. In the event hypertension exists it seems plausible to surmise that an excess of renin is being produced or that insufficient amounts of renin inhibitor are present. From this theoretical background, two approaches to the problem can be seen. If the kidney producing the excess renin can be removed, or a sufficient amount of renin inhibitor can be supplied the patient, the normal balance will be re-established and the blood pressure level will return to normal. As a matter of fact clinical reports have appeared in the literature indicating the validity of both approaches.

The recent publications of Page and his co-workers indicate that the extraction of the anti-pressor substance from normal kidneys is feasible and that the injection of this extract will markedly diminish hypertension not only in experimental animals but also in humans. As yet this work is in its earliest stages and the extract is not available commercially. While the results thus far are promising, the data are still incomplete. The other approach involves the removal of the kidney producing the excess renin, provided the offending kidney can be identified. This has been done on hypertensive dogs by Goldblatt and on humans by a number of men, including Barney and Suby, Barker and Walters, Leadbetter and Burkland.

These studies have included a variety of pathological conditions producing obstruction to the arterial flow through the kidney (atrophic pyelonephritis, anomaly of renal artery with a muscle plug reducing the lumen to a mere slit, ectopic kidney with deficient blood supply because of its malposition, etc.). However, the consistent finding has been renal ischemia accompanied by extensive scarring and atrophy of the renal functioning units with marked thickening of the arterial walls.

At this time brief attention will be given to a case, illustrating the association of unilateral renal ischemia and hypertension. This has been reported more completely in another publication.

The patient is a twelve-year-old girl admitted to Sparks Memorial Hospital on September 7, 1940, with

the complaint of severe headaches and partial blindness of one year's duration. The headaches were right temporal and occipital in distribution and characteristically appeared on awakening in the morning. A few hours later they usually disappeared. The frequency of the headaches increased as time elapsed and in November, 1939, following an unusually severe attack, a right facial paralysis appeared. During the next few months complete recovery from the facial palsy occurred but the headaches became more severe and were now accompanied by vomiting, on some occasions of a projectile nature. In addition, progressive impairment in vision was noted. In June, 1940, sudden total blindness occurred following an unusually severe headache. Vision gradually improved following this attack, but from that date on the child had marked difficulty in school due to inability to see the blackboard. Glasses prescribed by an optometrist were without effect on her difficulty and in September, 1940, she was unable to read ordinary print.

Past history is non-contributory and may be passed over with only the comment that no history of any urinary or bladder dysfunction could be elicited.

The outstanding physical findings were few in number. The blood pressure was 230 systolic and 160 diastolic. Vision was 20:200 in both eyes and the optic discs were choked. Marked angio-sclerotic changes were present in the fundi such as is commonly found in malignant hypertension. Non-protein nitrogen was normal as was the urine except for a trace of albumin and a small number of pus cells.

It is important to note that no casts or erythrocytes were found in the urine for it was on this account that a complete genito-urinary investigation was undertaken. Suffice it to say that on complete work up a small functionless right kidney was found.

For ten days following admission the patient was kept at bed rest and given phenobarbital at regular intervals. During this time the lowest blood pressure was found to be 190/130.

On September 19 right renal exploration was undertaken under nitrous oxide-ether anesthesia. An extremely small scarred kidney was found situated high up under the ribs. This was removed without complication after a moderate amount of difficulty due to densely adherent perinephritic tissue. Postoperative recovery and convalescence were without incident.

The pathological findings in this kidney are entirely similar to those found in hypertensive dogs. The kidney was approximately 10% of the normal weight (11.5 gm.) and was the size of a Brazil nut. The microscopic appearance emphasizes the ischemic character of the condition. The sectioned blood vessels were amazingly thickened in their intima with consequent marked narrowing of their lumina and the great majority of the glomeruli and tubules were completely or partially obliterated with dense connective tissue replacing obliterated structures. It is interesting to note that these sections are typical of the pathology found in so-called malignant hypertension.

Frequent blood pressure and pulse recordings were made during the hospital course and were at a consistently lower level than prior to surgery. Eighteen days following operation the child was discharged with a blood pressure of 128/82.

Astounding changes have taken place during the past eight months. The blood pressure remains consistently about 120/80. Marked improvement has taken place in the optic fundi. The vessels have lost their tortuosity. Arterial spasm has disappeared and the discs are no longer choked. Definite residua of the areas of exudation remain, but many have healed by scarring and no fresh lesions are visible. Unfortunately, severe residua involve the macular area in the right eye and have allowed little improvement in the vision of that eye, the last examination indicating 20:100 plus. The vision in the left eye is now 20:35, however, and the patient can see well enough to read without difficulty. The headaches have never reappeared and the child is no longer irritable and cranky.

Comment

It must be admitted at the outset that this case has only been followed for a period of eight months and cannot yet be classified as a cure. At the same time, however, it does seem likely that this favorable reaction will continue. Close contact is being maintained with this child and further reports will be made at a later date.

It is true that only a few cases of this type have been reported and most hypertensives will not fall in this group. However, at the present time this type of case carries hope for cure as does no other, and every effort should be made to unearth these cases. Certainly no hypertensive who has a previous history of renal infection—no matter how remote—should be denied this opportunity, and the study of any hypertensive individual is no longer complete without pyelograms. The omission of intravenous pyelography is no longer justified unless concrete evidence of vascular nephritis can be found.

It is noteworthy that this child was examined by several physicians of ability before entering the hospital. In addition, the case was presented at a county medical meeting before a representative group of doctors. The diagnosis of malignant hypertension was made and a hopeless prognosis given. The fact that not a dissenting voice was heard indicates the general lack of knowledge among physicians concerning this newer phase of the problem of hypertension. This paper is presented in an effort to emphasize the necessity for thorough investigation in cases of hypertension. Such practice will undoubtedly reveal other cases of similar nature.

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THE KANSAS CITY SOUTHWEST CLINICAL SOCIETY ANNUAL FALL CLINICAL CONFERENCE

For the nineteenth consecutive year, the Kansas City Southwest Clinical Society will present its Annual Fall Clinical Conference in Kansas City, Missouri, October 6, 7, 8, 9, 1941.

Fifteen distinguished guests from various cities of the United States will present phases of medical advancement with which they have been identified from research and clinical viewpoints. Clinicians from Greater Kansas City who have achieved enthusiastic approbation of their colleagues at home, and many who enjoy more than local reputation, will participate in rounding out the program for the Fall Conference.

Scientific exhibits worthy of study are being prepared by members who have the knack of reaching into your brain cells through pictorial methods and alluring statistics.

Technical exhibits upon new remedies, tried and true products, and mechanical devices of modern medicine will be displayed in greater numbers this year.

The Clinical Conference idea, pioneered in Kansas City almost twenty years ago, is now established in many cities throughout the country. The basic idea for clinical conferences is the continuing education of the physician, general practitioner or specialist, who is caring for the American public.

The 1941 Fall Conference program is ideal for any physician who wishes to listen and acquire new ideas, restore forgotten points and polish up on useful information. Plan now to come to the Nineteenth Annual Fall Clinical Conference. If you have not received the Kansas City Medical Journal, with the tentative program of the Conference, one will be sent to you upon request.

THE BEDSIDE DIAGNOSIS OF CARDIAC ARRHYTHMIAS *

DRIVER ROWLAND, M. D.
Hot Springs National Park

Palpitation is one of the commonest symptoms that brings a patient to the physician, and an irregular or abnormal heart action is one of the most frequent signs that the physician discovers on examination of the patient. The importance of the correct diagnosis of an arrhythmia cannot be over emphasized. Often the diagnosis and proper treatment means the difference of life and death to the patient. On the other hand, I have seen cardiac neurotics made out of patients in whom there were no more serious arrhythmias present than frequent extrasystoles. Also, I have knowledge of quite a few young boys who have been taken out of school and put to bed for months because of an arrhythmia which is a variant of normal heart action, that is sinus arrhythmia.

Whereas the electrocardiogram may be necessary for the breaking down of a few complex arrhythmias, I judge over 90% of irregular heart action can be diagnosed clinically. Practically, it is merely a matter of training, and with practice it is surprising in how short a time one can become more or less expert in recognizing these irregularities of heart action.

We might define cardiac arrhythmias as heart rates faster than 100 or slower than 60 beats per minute, or in which the time from beat to beat varies by more than .12 of a second. Any variation less than .12 of a second is not noticeable to human perception.

Arrhythmias may be regular or irregular. This fact in itself is the first step in their diagnosis, as the regularity or irregularity of the heart beat will immediately bring certain probabilities to mind, and at the same time more or less eliminate other probabilities.

First, let us take up the arrhythmias that occur with rates in excess of 100 beats per minute. The commonest arrhythmia is, of course, sinus tachycardia. All this is, is a normally beating heart that is speeded up. This is, of course, a natural phenomenon, and is seen normally in exercise, certain fevers, excitement, etc. Very frequently it occurs when the patient sees the doctor for the first time, and in none of these instances is it at all abnormal. It is seen ab-

normally in thyrotoxicosis, heart failure and a few rarer conditions. Occasionally we see a patient who normally at rest has a persistent pulse rate above 100, but these cases are rare. Furthermore, some individuals can speed their hearts up voluntarily. The rate in sinus tachycardia varies from 100 to 160 beats per minute and over. However, any heart rate over 160 beats per minute is usually not sinus tachycardia. It is characterized in beginning gradually and stopping the same way, and is influenced by exercise and respiration, which is not true of most other regular rapid heart actions. We must distinguish sinus tachycardia from two other fast regular cardiac arrhythmias, which are auricular flutter and paroxysmal tachycardia, both auricular and ventricular.

Auricular flutter usually is regular in rhythm, and, if irregular, is very difficult to distinguish from auricular fibrillation. If there is any doubt, call it fibrillation, as auricular fibrillation is ten times more frequent than flutter. The heart rate in auricular flutter tends to be from 120 to 160 beats per minute. This is the ventricular rate. The auricles here are usually beating twice as fast or, less frequently, four times as fast. The heart rate is very constant, i. e., it tends to remain the same under all conditions and is unlikely to be influenced by respiration, exercise, amyl nitrate, etc. Suspect flutter in any heart in which there is a history of long continued regular rapid heart action. If this has been present for two weeks or longer, the chances are it is auricular flutter. In a suspected case watch the response to exercise and respiration. If the rate remains constant, then the arrhythmia is probably either flutter or paroxysmal tachycardia. Put the patient in a semi-recumbent position so that the jugular veins are visible. If auricular flutter is present, often there will be seen very rapid undulations of the veins, which are two to four times the heart rate at the apex. If still in doubt, press on the carotid sinus at the angle of the jaw. If this rapid heart action is due to auricular flutter, the heart rate is suddenly slowed. This usually changes to exactly one-half the former rate, remains this slow for a few seconds, then returns to its former rate. This test will differentiate flutter from both auricular and ventricular paroxysmal tachycardia in which the heart rate tends to be about the same speed. We will now discuss these two interesting arrhythmias.

These are both common, auricular paroxysmal tachycardia being much more frequent than ventricular. In fact, it is the third most common

* Read before the Sixty-sixth Annual Session, Arkansas Medical Society, Little Rock, April 15, 1941.

cause of irregular heart action, following extrasystoles and auricular fibrillation. In both these disorders of heart action the heart rate is in the same neighborhood as auricular flutter. However, particularly in the auricular variety the rate tends to be faster, and most of them I have seen have been over 200 beats per minute. If the heart rate is over 180 beats per minute, the chances are that it is due to paroxysmal tachycardia. The top limit for the ventricular rate in flutter is around 170, except the one to one variety, which is very rare.

In the auricular variety of paroxysmal tachycardia the heart rate, like in auricular flutter, is remarkably constant, not being influenced by exercise, respiration, etc., and the heart tones are similar. The tones and the rate remain the same throughout the paroxysm, varying almost none at all. The heart sounds might be likened to a watch ticking, they are so constant and regular. With both these arrhythmias there is a history of beginning rapidly and ending the same way. This distinguishes them from a simple sinus tachycardia. To distinguish the auricular variety from flutter probably carotid sinus pressure is the best method. With auricular paroxysmal tachycardia the paroxysm is stopped and stopped abruptly, or there is no effect. In flutter, as already mentioned, the heart is slowed momentarily, then rapidly returned to its former rate.

Although the ventricular variety of paroxysmal tachycardia is in the same neighborhood as the auricular type and auricular flutter, as regards rate it is usually not hard to distinguish. The rate is more variable, and the heart sounds vary as to pitch and character. Also pressure on the carotid sinus will have no effect.

The only irregular rapid heart action of any consequence is auricular fibrillation. The rate here varies and may be as rapid as 180, but is more likely between 120 and 160 beats per minute. Any irregular heart action over 120 is almost always auricular fibrillation. In this condition the rhythm is totally irregular, so much so it led clinicians in the past to designate it as "Pulsus Irregularis Perpetuus" and "Delirium Cordis." There tends to be no rhyme or reason to the heart's action. Often there will be a series of slow beats, then a few fast ones. However, with the fast beats there is no pause. This will distinguish between auricular fibrillation and extrasystoles, after which there is almost always a pause. You will notice I have said nothing about a pulse deficit. This is mentioned frequently in textbooks, but, while occurring in

auricular fibrillation, is not characteristic of it alone, and may tend to lead one astray if too much confidence is placed in it.

Now let us look at the cardiac irregularities that occur in the range of the normal or usual heart rates, i. e., from 60 to 100 beats per minute.

A very important irregularity that often is not recognized is sinus arrhythmia. This is a normal phenomenon, and it was once stated by McKenzie that this was the sign par excellence of a normal heart. This is a disorder of youth, and is most often seen in strong, well muscled boys in their early teens. In this condition there is a marked variation between beats. It is due to variations in vagal tone produced by respiration. There will be noticed a few rather rapid beats, then a long pause or series of pauses, following which the heart gradually speeds up again. The slower the rate the more pronounced the arrhythmia. It will disappear with exercise and is closely related to respiration. Have the patient breathe slowly and deeply and this variation in beats becomes extreme, and the relationship to respiration is beautifully demonstrated.

The most frequently of all cardiac irregularities is the extrasystole or, more correctly speaking, the premature beat. While serious disturbances of the cardiac mechanism may not attract the patient's attention to the heart, these extra beats nearly always impress themselves on the patient's consciousness. The presence of these are frequently responsible for the patient visiting the physician, and in unstable people are very prone to cause a cardiac neurosis. These are described by the patient as a skipping of the heart or that the heart seems to turn over in the chest.

Premature beats or extrasystoles are characterized by their prematurity. They come early, right on top of the preceding beat. In no other irregular arrhythmia does one beat come so close to the preceding except in auricular fibrillation. The two can usually be distinguished by having the patient exercise. With exercise these extrasystoles disappear, whereas, if the arrhythmia is due to auricular fibrillation, the irregularity is made worse. Also, following the extrasystole there is a pause, this is not true in auricular fibrillation. Extrasystoles may be confused with heart block, because, when palpating the pulse at the wrist, if the beat is too premature, it may not open the aortic valve, so that no impulse is felt. This is sometimes called a dropped beat, but should never be labeled as such. The heart has not dropped a beat, but, on the contrary,

has actually gained one, so to speak. If one listens at the heart, the distinction can easily be made, as there will be heard the first heart sound following rapidly the preceding beat, but not the second as the beat was too weak to open the aortic valve.

These extra beats are often paired or coupled regularly with normal beats, producing, if they occur every second beat, a *pulsus bigeminus*, or, if every third beat, a *pulsus trigeminus*. If these beats fail to come through, as they sometimes do, the pulse rate at the wrist will be one-half to two-thirds what it is at the apex. The lesson to be learned from this is never to rely on the radial pulse in trying to arrive at a diagnosis . . . always auscult the heart and then you will find a true picture of what is going on.

It is possible sometimes clinically to distinguish premature beats of auricular origin from those of ventricular origin. However, practically this is of no great importance, so it is hardly worth the attempt. Ventricular premature beats are much more frequent than auricular, so, if you guess they arise from the ventricle, in a great percentage of cases you will be correct.

Never forget that auricular fibrillation and flutter may occur with a slow pulse. This is particularly likely if the patient is in the older age group or has been on digitalis. The criteria for the recognition of fibrillation are the same as have been given. A slow flutter will rarely be recognized clinically unless, as sometimes happens, the heart rate will suddenly double with slight exercise.

Slow heart action, while not as frequent as rapid or irregular heart action, is just as important.

The most frequent cause of slow heart action is sinus bradycardia, which implies a natural action of the heart at a decreased rate. It is seen normally in adolescence, athletes, and not infrequently the pulse slows with advancing age. It appears often during convalescence from acute illnesses, also in jaundice, and in gross cerebral lesions as apoplexy, tumors, and meningitis. The rate varies usually between 50 and 60 beats per minute, occasionally it may fall to 45 or slightly lower, and still be simple sinus bradycardia. Recently I saw a patient, who, following a cerebral thrombosis, developed a constant slow rate that varied from 42 to 47 beats per minute, in whom there was found to be just a sinus bradycardia. To distinguish this condition from block, exercise these patients and there will be noticed a gradual speeding up of the pulse rate.

The only important form of heart block that need worry us clinically is auriculo-ventricular block. This is due to some cause that will not let the impulse that is begun in the auricles get to the ventricles. This impulse may be blocked only at long intervals or it may be blocked regularly every third beat, every fourth beat, or every other beat, and, finally, it may be blocked completely so that the junctional tissue has to take up impulse formation on its own hook.

The earliest form of recognizable block is the simple dropping out of a beat. On listening to the heart there will be a pause. This pause is not preceded by an extra sound. This must be differentiated from extrasystoles. Be slow to diagnose block and suspect extrasystoles, as premature beats are common, where heart block is comparatively rare.

A more severe form is when every third, or every fourth, or every other beat is blocked out. This is known as 4 to 3, 3 to 2, and 2 to 1 block. Two to one is probably the commonest.

Always suspect heart block when the pulse rate at the apex is below 45 beats per minute. With 4 to 1, 3 to 1, and 2 to 1 block the rate is slow but regular. With other varieties of partial block the rhythm is irregular. In 2 to 1 block exercise will frequently cause the heart rate to suddenly double, then subsequently will abruptly return to its former level. This change is abrupt, not gradual as with sinus bradycardia. With a heart rate of 35 beats per minute or below complete block is suggested. The rhythm here is usually regular and uninfluenced by exercise, respiration, etc. Characteristically, in complete block there will be heard variation in the heart tones from beat to beat. The tones vary in intensity and show *inconstant* reduplication. Sometimes muffled auricular sounds can be heard, but this, in my experience, is rare.

Summary

1. The commoner arrhythmias have been discussed, and the clinical recognition of them has been stressed.

2. It has been pointed out that these arrhythmias can be often recognized clinically, and the importance of their recognition has been brought out.

1105 Medical Arts Building

HISTORY OF THE ARKANSAS MEDICAL SOCIETY

Compiled by the Committee

Frank Vinsonhaler, Chairman, Little Rock; M. L. Norwood, Lockesburg; E. F. Ellis, Fayetteville; Robert Caldwell, Little Rock; W. T. Wootton, Hot Springs National Park; H. Moulton, Fort Smith; J. M. Lemons, Pine Bluff; E. E. Barlow, Dermott; D. A. Rhinehart, Little Rock; W. H. Mock, Prairie Grove; L. J. Kosminsky, Texarkana; F. O. Mahony, El Dorado; M. E. McCaskill, Little Rock; Geo. B. Fletcher, Hot Springs National Park; O. J. T. Johnston, Batesville; S. J. Wolfermann, Fort Smith; A. S. Buchanan, and H. T. Smith, McGehee.

COMMITTEE ON MEDICAL LEGISLATION

M. L. NORWOOD, M. D.

The 1903 Committee on Medical Legislation consisted of Drs. Runyan, Shinault, Newton, Ed Dibrell and M. L. Norwood. This Committee was instructed by the Society to endeavor to get enacted into law a State Board of Medical Examiners. This Committee had drafted a bill creating said Board and made overtures to a Committee from Homeopathic and Eclectic schools. Notwithstanding we offered each a representative on said board, they demanded two members from each school. This would have left three of seven members (one from each Congressional District) for regulars, which the regulars declined. As a compromise measure the three board plan was adopted. At this time it looked like the only hope for any legislation at all. The three board bill was passed by the Legislature at regular session in 1903. The lawyers informed the Committee that any law that did not recognize the licenses of all doctors then licensed would be unconstitutional. No contribution was made from the Society to defray expenses. No appropriation was made by the Legislature to make it operative.

The State Medical Society met in Jonesboro, April 30, May 1 and 2, 1903. In compliance with the law recommended a list of names to the Governor for appointments on the Board. Governor Davis appointed the following members as the first Board: Dr. J. P. Runyan, Little Rock; Dr. C. R. Shinault, Helena; Dr. G. V. Poynor, Green Forest; Dr. Wm. Crutcher, Pine Bluff;

Dr. Adam Guthrie, Prescott; Dr. O. E. Jones, Newport; and Dr. M. L. Norwood, Lockesburg. When this Board met for organization, Dr. Shinault was elected President; Dr. Runyan was elected Secretary; and Dr. Norwood was elected Treasurer.

The first question confronting the Board was where were the funds coming from to make this law operative? Dr. Guthrie suggested that a circular letter be mailed to all regular physicians asking for a donation of one dollar or more to cover expenses for blank applications, certificates, postage and clerk hire. Most of them responded. After blanks made out and returned, Certificates of Licensure were printed and signed by each member of Board, no stamp signatures being permitted. This was quite a job, lasting about a week, to sign certificates for each and every doctor who then had license, about two thousand in number. The amount received from voluntary donations did not cover actual expense, so the Board had the pleasure of donating their time and expenses to make up deficiency incurred. This bill was sponsored by Dr. Butler of Sheridan in the Lower House and by Hall Norwood of Mena in Senate. The osteopaths and other cults put up a strong fight against the bill. Five members of this first Board are now deceased, namely: Drs. Runyan, Shinault, Crutcher, Jones, Guthrie; Dr. Poynor moved to Missouri and was still alive in 1938 when last heard from; Dr. Norwood is the only living member now in Arkansas. This law was not perfect when passed, and has been greatly improved by amendments. Some day we may have only one Board, with one member each from homeopaths and eclectics. This is my wish.

Basic Science Law

When Dr. R. H. T. Mann was elected President, his principal ambition was to have a Basic Science Law in Arkansas. In order to secure this law, Dr. Mann, knowing this would create a fight, wisely selected Dr. Vinsonhaler as Chairman of the Committee on Medical Legislation. Dr. Vinsonhaler, at his own expense and on his own time, made a tour of the state going into most of the counties, addressing county medical societies and civic bodies, thus creating sentiment for the measure. The Legislature was difficult to handle. The Society made a liberal appropriation and employed an able lobbyist. Through the efforts of lobbyist, the Committee on Legislation and the efforts of many indi-

EDITORIAL NOTE: This is the ninth installment of the preliminary draft of a History of the Arkansas Medical Society. Subsequent issues will contain additional sections of the history as now prepared. The Committee will welcome suggestions or additions which the membership shall care to present.

vidual doctors, the law was finally passed over the protest of the cults.

1916-1917

M. L. Norwood was president. In his address he recommended the Society make an appropriation to teach preventive measures against typhoid fever and malaria both of which were prevalent in the rural districts of the state. The Reference Committee endorsed this and the House of Delegates voted a sum of money for the purpose. A Committee was appointed who prepared a short pamphlet in form of a catechism which was distributed through the county medical societies to the teachers of the state who had them pasted in back of textbooks of the children in sixth and seventh grades.

MEDICAL LEGISLATION 1929-1939

HON. PETER A. DEISCH

The legislation that the Society has secured since 1929, is as follows:

1929: Basic science law. Appearing as Section 10795, et seq., Pope's Digest.

1931: Reclassification of demands against estates. Prior to the passage of this law, the first class of claims consisted only of funeral expenses, and if this exhausted all the available assets of the estate, nothing would remain for the expense of the last illness. The new law included in the first class of claims, expenses of medical and surgical attention, nursing, and hospitalization.

1933: Medical, nursing and hospital lien law. Appearing as Section 10810, et seq., Pope's Digest. A complete explanation of this law, with forms, was published in the Journal for June, 1933.

1935: (Act 113). Restricting sale of barbituric acid, its salts and compounds.

Giving Arkansas State Board of Medical Examiners privilege of recognizing a certificate issued by the national board of examiners, in lieu of an examination by our board. (Act 165.)

Statute of limitations upon alleged malpractice suits. Theretofore malpractice suits could be brought against a physician many years after the alleged act of malpractice was committed.

Providing that each of the examining boards shall file with the Secretary of State a list of all licenses issued from a period 20 years prior to the enactment, and thereafter each year file a

list of the licenses issued during the preceding year, and advising him of deaths.

We also assisted this year, the Optometrists in securing the passage of their law, regulating their practice. This became Section 10835, et seq., Pope's Digest.

1937: Uniform narcotic act.

1939: That the examining board could refuse to issue a license to an applicant who is not an American citizen.

During this session the Legislative Committee assisted the University, materially in retaining the class "A" rating of the medical school, by assisting Leo Nyberg in the passage of the bill levying additional tax on beer, part of the revenue to go to the University, for the school hospital.

A change in the spelling of the name "Petroagar" to "Petrogalar" has been announced by the Petroagar Laboratories. The change is being made in both the product name and corporate name.

Company officials, while pointing out that the adoption of the new spelling does not affect the formula or quality of the product in any way, said that they considered the change advisable to avoid any possible misconception as to the nature of the product.

"Because it has never been the intention of the company to imply that agar-agar was used for any other purpose than as an emulsifying agent, the last syllable of the former name has been altered in favor of the new spelling," officials said.

Officials emphasized that no change has been made in the size of the package, price, or formulae and that each of the five different types of the product will carry the new spelling "Petrogalar." The new corporate name is: Petrogalar Laboratories, Inc., and the address remains, 8134 McCormick Boulevard, Chicago, Illinois.

COMING MEDICAL MEETINGS

Kansas City Southwest Clinical Society, Kansas City, October 6th-9th, 1941.

Fifth Councilor District Medical Society, Camden, October 9th, 1941.

Second Councilor District Medical Society, Batesville, October 13th, 1941.

First Councilor District Medical Society, Jonesboro, October 15th, 1941.

Oklahoma City Clinical Society, Oklahoma City, October 27th-30th, 1941.

Southern Medical Association, Saint Louis, November 10th-13th, 1941.

FOR SALE—Trial case, worth \$40.00. Mrs. S. Harris, Star City, Arkansas.

TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

EXPERIENCE in the First World War taught us the importance of discovering tuberculosis among military men. When the Selective Service Act went into effect the Navy was requiring a chest roentgenogram for all enlisted and commissioned men, and the Army for the commissioned personnel only; facilities for routine roentgenography of all men were not at first available. Among the civilian agencies which supplemented the efforts of the Army in this emergency was the Bureau of Tuberculosis of the New York City Department of Health. A record of that organization's experiences is published in the Journal of the American Medical Association from which these abstracts are taken.

X-RAYING MILITARY MEN

An order issued October 28, 1940, by the Adjutant General's Office of the United States Army made it possible for civilian organizations to set up a roentgenographic service for men inducted into the Army. It provided for payment for X-ray films and for the services of civilian roentgenologists (under due control) until such time as the Army could assemble its equipment and assume full responsibility.

The Bureau of Tuberculosis of the New York City Department of Health, has been engaged in mass roentgen-ray surveys of the apparently healthy population since 1933. These surveys have been accepted as a basic part of the tuberculosis control program of New York City and thus interest, based on experience, in providing a similar service for inductees and members of the State National Guard was rife. Accordingly, the Bureau's mass roentgen-ray services which were made possible through the WPA, were offered to the Surgeons of the Second Corps Area prior to the Adjutant General's directive that was issued on October 28, 1940. Financial assistance was received from the tuberculosis associations of Queens and the Bronx.

After January 1, 1941, the Army assumed full financial responsibility for the roentgen-ray service in induction centers. The Department provided personnel for the interpretation of films. Since January 15 this service has also been taken over by the Army, which has assigned medical reserve officers qualified in this special field. The roentgenographing of National Guardsmen

has been entirely at the expense of the Department of Health. Under existing regulations the Army could not pay for this service until after induction, and it was important that rejections be made before induction.

At the outset there were four induction stations. Since January 1, 1941, all work has been done in two stations, one in Manhattan and one in Queens.

Those rejected men who were residents of New York City were given an appointment within the next two or three days to appear at the Health Department's Central Chest Clinic, where a complete study of the case was made. If this examination proved the original findings to be of no significance, the local draft board was so notified.

Rapid roentgenographic service was necessary as the recruit was supposed to be cleared through all examinations by 2:30 p. m. of the day he reported at the induction station. With from 60 to 300 men per unit to be handled daily, even the rapid roll method used in the routine survey program was inadequate. Consequently a special type of apparatus was devised. A modification of the roll paper camera was used in connection with a specially constructed portable dark room measuring 8 by 8 feet with the back of the camera integrated into one side of the dark room. A signal device was installed between the roentgen-ray technician and the dark room. As soon as a film was exposed, the signal was flashed and the dark room crew cut off the film

and placed it in the developing bath. The signal was then reversed indicating that another film was ready to be exposed. A team of three, consisting of a technician and two dark room assistants, were able to operate faster than one exposure a minute. The films were processed in large trays and from the fixing bath were passed out to the physician through a light-proof pass. After being read, the films were washed in a portable tank and dried in a special device designed for the purpose.

Acceptance or rejection was based on Army regulations. Men showing any form of reinfection types of tuberculosis were rejected because lesions of such types may become aggravated under conditions of military service. Primary lesions considered as active or extensive calcifications were likewise cause for rejection. Other forms of significant pulmonary disease, such as bronchiectasis, pneumonitis, atelectasis or extensive pleural changes, were cause for rejection until further study could determine their importance. Men with obviously abnormal cardiac silhouettes were reported to the medical examiners for such further study as might be indicated. Men with nothing more than apical caps, and those with small well-healed primary lesions were not rejected.

The group of men examined up to January 15, 1941, during which the Department of Health was actively engaged in the program, included 6,609 inductees and 9,541 Guardsmen, a total of 16,150 individuals who were X-rayed.

Of the inductees, 1.36% were rejected and of the Guardsmen, 1.21%. About one-third of the Guardsmen were below the age of 21, while only about 0.5% of the inductees were below that age. An all-Negro regiment (National Guard unit) had the highest mean age in all groups and the highest rate of rejection, which was almost entirely on the basis of pulmonary tuberculosis. If the findings in this unit are subtracted from the totals of all Guard units a greater difference will be found between Guardsmen and inductees.

Classification by stages of disease of the 70 men considered clinically significant shows that 65.7% were minimal, 32.9% moderately advanced and 1.4% far advanced. Primary lesions indicated by calcific deposits were found in 6% of the white men, 8.7% of the Negroes and 7.1% of the Puerto Ricans.

The group of men examined since January 16 and through March 31, 1941, totaled 35,210

men. During that period the Department of Health's part has been to re-examine and classify New York City men rejected at the induction center. In this time 458 men have been rejected, 379 of whom have thus far been cleared at the Health Department Clinic. In 49, or 12.9% of those re-examined the cause for rejection at the induction station was not confirmed and the man was considered suitable to be accepted in the Army from the standpoint of his roentgenogram.

A detailed cost analysis of personnel, equipment and materials necessary to complete this study indicated a total of \$23,614.20. Using this as a basis for computation, the unit cost to examine each individual by roentgenogram was \$1.47. (The cost of taking a roentgenogram and its interpretation without any further follow-up was \$13,911.20, or 58.8% of the total.) The unit cost of rejecting a man for military service on the basis of the total cost was \$106.02 for inductees and \$122.37 for Guardsmen.

Spillman has reported that the cost to the federal government of accepting a person with tuberculosis into the armed service is \$10,000. Thus, in these studies involving 41,819 inductees and 9,541 Guardsmen, or a total of 41,360 men, 561 persons with chronic pulmonary tuberculosis were rejected, representing an estimated saving to the government of \$5,610,000.

Examinations for Tuberculosis by Herbert R. Edwards, M. D., and David Ehrlich, M. D., *Jour. of Amer. Med. Assn.*, July 5, 1941.

The trend toward surgical treatment of tuberculosis is perhaps the most significant and far-reaching change which has come about in the tuberculosis hospital field. This has involved changes in design and equipment of the hospital, in the organization by the staff, in provision for nursing of surgical cases, and development of closer relations with general hospitals. Wherever the tuberculosis hospital is not prepared to meet the demand for better operating rooms, laboratories, and roentgen-ray equipment, the facilities of the general hospital must be utilized. *Editorial, Penna. Med. Jour.*, March, 1940.

Tuberculosis as a cause of death among the wives of men who died of the disease is almost three times as high as it is for all women. Among sisters, the relative frequency is 2.3 times as high. Antonio Ciocco, M. D., *Human Biology*, May, 1941.

THE JOURNAL

OF THE

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EDITORIALS

EMERGENCY MEDICAL SERVICE FOR
CIVILIAN DEFENSE

Detailed plans for the organization of an
Emergency Medical Service for Civilian Defense
are contained in Bulletin No. 1 of the Medical
Division of the Office of Civilian Defense, Wash-
ington, which has been placed in the hands of
all Society officers and the county society sec-
retaries. This bulletin recommends that all ap-
proved general hospitals in industrial areas in
the interior proceed without delay in the or-
ganization of a field casualty service. These
so-called defense areas will, no doubt, be desig-
nated, by the State Council of Civilian Defense.
The size of these emergency units should be
proportional to the bed capacity of the parent
hospital. To facilitate coordination of the med-
ical and hospital facilities, there should be
prompt action on the part of the medical, hos-
pital, nursing and public health professions.
County medical societies are urged to take the
initiative in arrangement of these procedures.
The Director of Civilian Defense, F. H. La-
Guardia, has this to say regarding the bulletin:

"To those who do not as yet appreciate the
need for action, I should like to quote from a
similar official bulletin issued in England in 1938

just prior to the beginning of hostilities, which
describes measures for safeguarding the civilian
population:

"The need for (these measures) is not related
to any belief that war is imminent. It arises from
the fact that the risk of attack from the air,
however remote it may be, is a risk that cannot
be ignored, and because preparations to mini-
mize the consequences of attack from the air
cannot be improvised on the spur of the moment
but must be made, if they are to be effective, in
time of peace'."

The English have lived to see the truth of this
statement demonstrated in a most tragic way.
We have the opportunity to make more ample
preparations than did they.

SCHOLARSHIPS AVAILABLE

Following the recommendation of the Com-
mittee on Maternal and Child Welfare of the
Society, the Arkansas State Board of Health an-
nounces that scholarships in pediatrics and ob-
stetrics are available to those physicians engaged
in part-time child health and prenatal clinics of
the State Board of Health. Such scholarships are
available in certain accepted medical schools
and provide travel expense, tuition and an allow-
ance to the physician for the period of training.
The courses, as now offered, provide for from
one to four weeks special work in these subjects.
Further details may be obtained from Dr. W. B.
Grayson, State Health Officer, Little Rock.

COMMUNIQUE

To the Editor: Camp Murray, Sept. 3, 1941.

Join the 206th and see the world. Minnesota
last summer and Texas since January, then this
wet spot for the past month and next to the far
flung Aleutians. There are only about 800 of us
left here and we will probably be gone by the
end of the month. It rains here every day all
day long and we have only seen the sun once in
the last twelve days. It's not cold but got enough
snip in the air at night to make you reach for
the third blanket. Capt. Reagan has already
gone with 16 men from the detachment. Please
send the Medical Journal to the following of-
ficers to the address under my signature: Major
Stanley M. Gates, Capt. Thos. J. Raney, Jr.,
Capt. C. H. Reagan, and Lieut. Robt. M. Kelly.

This address will hold for our entire sojourn in
these parts as well as our final destination.

Stanley M. Gates,
206th Coast Artillery,
A. P. O. 3-P, Seattle, Washington.

PROCEEDINGS OF SOCIETIES

The Jefferson County Medical Society was addressed at its September meeting in Pine Bluff by P. D. Moore, Memphis, "Ureteral Kinks and Strictures," and by Lyle Motley, Memphis, "Indigestion." By petition, the members of the Cleveland County Medical Society have affiliated with the Jefferson County Medical Society and the Cleveland County Medical Society has been disbanded.

T. J. Cunningham, Jr., Secretary.

The Southeast Arkansas Medical Society met in dinner session at Monticello, September 15. S. C. Fulmer, Little Rock, conducted a clinical heart conference.

The Ouachita County Medical Society met in regular monthly session September 4 at the Camden Hospital. After a delightful dinner, served by the nurses of the hospital, the following program was rendered: "Arkansas' Care of Mental Cases," George Fletcher, Hot Springs National Park; "Carcinoma of the Prostate," H. King Wade, Hot Springs National Park; and "Some Obstetric Problems," C. P. Slaughter, State Health Department. Visitors were Dr. A. C. Kolb, Superintendent of the Hospital for Nervous Diseases, and Dr. N. P. Hollis of the same institution who spoke briefly.

R. B. Robins, Secretary.

The Tenth Councilor District Medical Society met at State Sanatorium, September 9, for the following program: "Primary Tuberculosis," W. O. Arnold; "Laboratory and X-ray in Tuberculosis," R. J. B. Hillard; "Extra-Pulmonary Tuberculosis and Treatment," A. C. Curtis; "Anesthesia in Tuberculosis," R. J. Dancey; "Clinical Symptoms in Tuberculosis," J. D. Riley; "Artificial Pneumothorax in Tuberculosis," R. R. Nowlin; "Surgery in the Tuberculous Patient," A. B. Dickey; "Relation of Physician and Patient in Tuberculosis," J. H. Howe; and "Differential Diagnosis of Tuberculosis," E. E. Holt, all speakers of the State Sanatorium staff. Following luncheon and a tour of the institution, the afternoon session was addressed by H. F. Carman, Dallas, on "Diagnosis of Tuberculosis." The following officers were elected: President, Thos. Douglass, Ozark; Vice-President, C. W. Hall, Greenwood; and Secretary, A. B. Dickey, State Sanatorium. The Society will next meet in Fort Smith.

PERSONALS AND NEWS ITEMS

"Protracted Roentgen Therapy of Malignancies, Particularly of the Head and Face," by D. A. and B. A. Rhinehart, Little Rock, appeared in the August issue of the Southern Medical Journal.

Frank G. Engler, Little Rock, spent an August vacation in Kansas.

J. L. Kellum, Fort Smith, spent a recent vacation in New Orleans and in Mississippi.

Dr. and Mrs. C. H. Kennedy, Fort Smith, spent an August vacation in Colorado.

T. E. Rhine, Thornton, has been elected surgeon of the Fordyce American Legion post.

Dr. and Mrs. B. L. Ware, spent an August vacation in Atlanta.

"Headaches," by Paul Mahoney, Little Rock, appeared in the September issue of the Southern Medical Journal.

W. J. Nelson, formerly of Albuquerque, has joined the staff of the Holt-Krock Clinic at Fort Smith as eye, ear, nose and throat specialist.

J. O. Rush, Forrest City, spent a summer vacation touring the western states.

The Okmulgee-Okfuskee County Medical Society was addressed at Henryetta, Oklahoma, September 8, by Carl Wilson, Fort Smith, "Prostatism," and Marlin Hoge, Fort Smith, "Cirrhosis of the Liver."

Geo. M. Love, Rogers, spent a recent vacation in Yellowstone Park and western states.

H. H. Smith, Fort Smith, spent a September vacation in Salt Lake City.

L. J. Kosminsky, Texarkana, attended the recent convention of the American Legion in Milwaukee.

G. E. Cannon, Hope, recently took special work at the Mayo Clinic.

W. A. Ellis, Jr., Helena, recently took special work at the Mayo Clinic.

Lt. James K. Grace, Belleville, has been ordered to active duty with the army medical corps and assigned to Camp Bowen, Boise, Idaho.

A. C. Shipp, Little Rock, has been elected president of the Southern Tuberculosis Association.

L. J. Kosminsky, Texarkana, has been elected chef de chemin de fer of the national organization Forty and Eight.

J. J. Monfort, Batesville, has been appointed a member of the Education Committee of Kiwanis International.

J. T. Herron, formerly of Hamburg, has been named health director for Phillips and Lee counties with office at Helena.

Jerome S. Levy and Grady W. Reagan, Little Rock, have been named chairmen of sub-committees from the Chamber of Commerce on tuberculosis and venereal diseases, respectively.

The Southern Tuberculosis Conference meeting at Asheville, North Carolina, during September, was addressed by A. C. Shipp, Little Rock, "Arkansas Training Program for Negro Teachers," and by J. D. Riley, State Sanatorium, who responded to the addresses of welcome at the annual banquet session.

R. J. B. Hibbard, State Sanatorium, spent an August vacation touring western states and the Canadian Rocky Mountain region.

Dr. and Mrs. F. Walter Carruthers, Little Rock, spent an August vacation in Colorado, Utah and Yellowstone Park.

Capt. Ellery C. Gay, M. C., U. S. A., is taking postgraduate work in plastic surgery in Washington, D. C.

Agnes Josephine Kolb, Donaldson, has been appointed specialist examiner for selective service in Hot Spring county.

The following have been appointed selective service examiners in Garland county: F. S. Tarleton, J. S. Stell, F. J. Scully, W. F. Porter, C. H. Lutterloh, L. E. Reed, G. A. Hebert, G. C. Coffey, T. N. Black, E. R. Browning, N. B. Burch, J. H. Chesnutt, C. E. Garratt, Foster Jarrell, L. E. King, D. C. Lee, L. G. Martin, Euclid M. Smith, and D. B. Stough.

Fred Hames, Pine Bluff, and D. A. Rhinehart, Little Rock, attended the recent session of the American Roentgen Ray Society in Cincinnati.

J. E. Little has accepted an appointment to the staff of the State Sanatorium.

T. E. Hardison addressed a recent meeting of the rural correspondents of the Conway Log Cabin Democrat at Petit Jean State Park.

D. W. Dykstra, Little Rock, recently addressed the Public Welfare Forum of that city on "Syphilis."

OBITUARY

HUGH E. LONGINO, age 47, of Texarkana, died September 2 at his summer cottage at the Little River Country Club. Born in Haynesville, Louisiana, in 1894, he spent the earlier years of his life in Magnolia. He graduated from the University of Arkansas School of Medicine in 1916 and had been in practice in Texarkana for the past 18 years. During the World War he served as captain in the army medical corps. Surviving relatives are his wife, a daughter, and two sons.

WYLIE R. HOLLOWAY, age 72, of Center Ridge, died September 11 while on his way to answer a call at Clinton. Born at Formosa in 1869, he graduated from the University of Arkansas School of Medicine in 1907 and had practiced in Van Buren, Faulkner and Conway counties since completion of his schooling. Surviving relatives are two daughters and three sons, two of whom are physicians.

RANDOM THOUGHTS OF THE SECRETARY

September 4th. Comes a complimentary letter on our travelogue from a bouquet tosser—Sam J. Allbright.

September 8th. Junketing to Henryetta tonight with Chamberlain, Wilson and Marlin Hoge, being at a loss over the extinction of the Greek army and thereby unable to repeat our collection efforts for Greek war relief as high-lighted our last appearance in this restaurant. Homeward, all contemplate how much rougher the highway is on the return than on the going trip. Hoge gives a new answer to the familiar quiz question: "How far can a dog run into a forest?" by his reply "To the first tree!"

September 9th. The Tenth Councilor District Medical Society hears an informative discussion on tuberculosis by the State Sanatorium staff and partakes, in abundant measure, of the hospitality of this splendid institution. At noon time about the grounds in a school bus, the doctors most interested in the dairy section, all professing ownership of one or more cows. The local Ferdinands are well and most substantially housed and certainly should be contented male cows. We tout the candidacy of Dickey for secretary of the society which should have defeated him but Chamberlain, Lesh and Kolb combine to destroy a beautiful friendship between Dickey and us, electing him to this post of honor.

September 10th. Our sea-faring comrade, Jim Amis, relates this one. A few weeks ago an applicant sent to the main station was rejected for hypospadias. The recruiter, unacquainted with the term, called the local physician's office for information. The doctor out, the office girl replied that she did not know but that she would look it up in the dictionary. Then she says: "Hello, er—." Recruiter: "What is it—flat feet?" The girl: "No, it's a long way from his feet," and reads from the book. Recruiter: "How do you know it's a long way from his feet; you haven't seen him!"

September 15th. Wangling an invitation from H. T. Smith, we join the Southeast Arkansas group in another of their fine dinner sessions, this time at Monticello, where Mine Host Perry Keith does his best to make it a pleasant dinner and many are in attendance, including L. T. Taylor who attends every meeting regardless of which lumber town may be the host. Departing we travel 280 odd miles to reach our comfortable and welcome bed at 3:45 a. m., hoping that we are the only ones from the meeting up and about at this hour.

September 18th. Myers Smith calls on us today bringing us the latest news from the State Board of Health, all of which helps us to keep relatively up-to-date the Journal mailing list and to fill out the personals. However, he is politely obdurate to our application for a scholarship in pediatrics.

WOMEN'S AUXILIARY NEWS

MRS. RALPH CROSS, Publicity Secretary
Texarkana

HYGEIA

Preparedness and defense being uppermost in the minds of the peoples of this hemisphere, it behooves us to "Take stock" as to our ability to put into service, not only in the military field, but in the industrial and economic as well, men and women who are physically fit. No nation is stronger than its health ratio. It is appalling to note that so large a percentage of our young men examined for service in the different branches of military endeavor, National Youth Administration, and allied industries are either rejected, deferred or reclassified, because of defects which are for the most part preventable or amenable to corrective measure. All this exists in a nation which prides itself in its low mortality rate, and longevity.

In our mad rush and speed somebody has forgotten to educate and interest the present generation now reaching maturity in health and hygiene. The Auxiliary of the American Medical Association has pledged itself to the program of awakening public interest along these lines. It will endeavor to do this by making Hygeia available to as many readers as possible.

I, therefore, take this method of urging each and every county Hygeia chairman to make an effort to place "Hygeia" in every school library, reading room, legion post, YMCA, YWCA, and allied organizations, various church societies, and civic organizations in the state of Arkansas. Also, I urge you make a concerted and determined effort to place it in homes where there are children.

Because Hygeia contains a vast storehouse of information which is authentic and understandable, let us here and now accept the challenge, and hold high this torch of knowledge to light the way for the rising generation which is the hope of the tomorrow.

MRS. J. B. JAMESON,
State Hygeia Chairman, Camden.

The Fall Board Meeting of the Auxiliary will be held at the Albert Pike Hotel, Little Rock, at ten o'clock Wednesday morning, October 1.

BOOK REVIEWS

New and Nonofficial Remedies, 1941, containing descriptions of the articles which stand accepted by the Council on Pharmacy and Chemistry of the American Medical Association on Jan. 1, 1941. Cloth. Price, postpaid, \$1.50. Pp. 691—LXX. Chicago: American Medical Association, 1941.

New and Nonofficial Remedies is the book in which are described the medicinal preparations found by the Council on Pharmacy and Chemistry to be acceptable for the use of physicians. The book is cumulative; each year there are added the descriptions of products accepted during the foregoing year. Those taken off the market or found no longer worthy of continued acceptance are deleted. The book is at that time also revised to bring it up to date with the most recent medical thought. Un-

How to Use S-M-A Powder

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2 Add enough warm previously boiled water to make one ounce.

3 Cap bottle and shake powder into solution. Feed at body temperature.



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tion of milk sugar and potassium chloride; altogether forming an antirachitic food. When diluted according to directions, it is essentially similar to human milk in percentages of protein, fat, carbohydrate and ash, in chemical constants of the fat and physical properties.

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til recent years the additions and deletions have about balanced. Recently, however, the bulk of the book has been increasing and this year's volume represents the largest book of the more than thirty volumes that have been issued.

This year's new additions include the new sulfanilamide derivative, sulfathiazole, as well as sulfapyridine sodium; antipneumococcal rabbit serum of types I, II, III, V, VII and VIII; human convalescent measles serum and human convalescent scarlet fever serum; and staphylococcus antitoxin. The field of endocrinology is represented by the addition of chorionic gonadotropin (follutein). The addition of shark liver oil reflects the search for new sources of vitamins A and D caused by the cutting off of foreign cod liver oil. Other newly-accepted preparations are ampules of camphor, digilanid and magnesium trisilicate.

The most extensive revision is represented by the rearrangement and amplification of the chapter, Serums and Vaccines. This chapter is now prefaced by a helpful index, an innovation in N.N.R. The chapter, Vitamins and Vitamin Preparations for Therapeutic and Prophylactic Use has been revised to keep it abreast of the newer developments in this field.

Annual Reprint of the Reports of the Council on Pharmacy and Chemistry of the American Medical Association for 1940. Cloth. Price \$1.00. Pp. 181. Chicago: American Medical Association, 1941.

This volume contains not only all of the published reports of the Council for the preceding year but also reports on products which were not deemed important enough to be published in "The Journal." Council reports may be classified in general as those of omission or rejection, preliminary reports and status reports on drugs or on various therapeutic and pharmacologic problems. Representatives of all classes appear in this volume.

There are a number of interesting reports in the "non-acceptable" category. The one on the widely exploited Neurosine of the Dios Company sounds a timely warning on the hazards of bromidism and uncontrolled hypnotic medication. The report rejecting a number of preparations of gonadotropic hormone from the serum of pregnant mares, together with the report rejecting certain ovarian and ovarian anterior pituitary preparations, attest the Council's continued critical interest in the field of endocrinology. This is also indicated in the report on Desoxycorticosterone, written by Doctor Edgar S. Gordon and adopted by the Council for publication with a statement of the Council's attitude on the present status of adrenal cortex. The Council finds adrenal cortex therapy now in an unsatisfactory and unsettled state.

Noteworthy preliminary reports are on Guanidine Hydrochloride-Calco, which has been proposed for use in the treatment of myasthenia gravis, and Acetylglycarsenobenzene, a new antisyphilitic for intramuscular use, which the Council feels should be further perfected. In its report the Council comments with approval upon the manner in which the Winthrop Chemical Company has developed the latter and studied it before even considering its commercial production.

It is difficult to choose any among the so-called status reports for special mention—all are noteworthy for one reason or another. The report on the present status of the injection treatment of hernia is a continuation of the Council's consideration of this question. The Council has reached the decision that it is necessary to condemn

the exploitation of the injection treatment of hernia by manufacturers of solutions.

Mention must be made of the excellent report on organic mercurial compounds as bactericidal agents, which states the Council's conclusion that no organic mercurial compound has yet been offered that will guarantee the destruction of spores under all conditions.

Another valuable report is that on the promiscuous use of the barbiturates. This is a continuation of a previous study of the use of barbiturates in suicide. The present study is an analysis of hospital data.

One cannot even glance through a volume such as this without reflection on the great value of the Council on Pharmacy and Chemistry's work, which so richly deserves the support of all who are interested either directly or indirectly in the progress of medicine.

Clinical Immunology Biotherapy and Chemotherapy in the Diagnosis, Prevention and Treatment of Disease: By John A. Kolmer, M. S., M. D., Dr. P. H., Sc. D., LL. D., L. H. D., F. A. C. P., Professor of Medicine, Temple University School of Medicine; Director of the Research Institute of Cutaneous Medicine; and Louis Tuft, M. D., Assistant Professor of Medicine and Chief of Clinic of Allergy and Applied Immunology, Temple University School of Medicine. 941 pages with 27 illustrations (including 11 color plates). Philadelphia and London: W. B. Saunders Company, 1941. Price \$10.00.

This is a full and clear discussion of the manner in which organisms produce disease; of immunity, of antigens, antibodies, allergy chemotherapy and a number of allied subjects. The practical applications are presented in detail.

Synopsis of Applied Pathological Chemistry: By Jerome E. Andes, M. S., Ph. D., M. D., F. A. C. P., Director of the Department of Health and Medical Advisor, University of Arizona, and A. G. Eaton, B. S., M. A., Ph. D., Assistant Professor of Physiology, Louisiana State University School of Medicine. Pp. 428. 23 illustrations. Saint Louis: C. V. Mosby Company, 1941.

The preface states that the primary purpose of this book is to provide a practical, simple, easily-read text on the application of pathological chemistry to clinical medicine. It is just such a book and is especially valuable to those physicians who wish a quick reference on the value of certain chemical analyses to the various pathological states.

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DAILY LOG

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No. 6

REGIONAL ENTERITIS—REPORT OF CASE—SUMMARY*

J. B. JAMESON, M. D.
Camden

Regional enteritis, also known as regional ileitis, terminal ileitis, or Crohn's disease, is an inflammatory disease of the terminal ileum, as a rule, involving all coats or layers characterized by necrosis, ulceration, and resulting cicatricial tissue, leading to stenosis of lumen, often followed by obstruction and fistulae formation.

Report of Case

J. G., white, male, single, age 20 years. Family history—Father died accidental death—age 48. Mother—living and well. 3 brothers—2 living and well, 1 died in infancy. 3 sisters—2 living and well, 1 died in infancy.

Past History—usual childhood diseases without complications. No illness of note. Some indigestion for past six months. Was constipated during this time. No history of diarrhea. Had thought indigestion was due to lead poisoning as a result of his work in pottery. Has not lost any time from work. Denies any venereal infections, and is temperate in habits.

Present Illness—One week before admission, he developed severe indigestion, aggravated by food intake. Discomfort was in epigastric region at first, then became indefinite as to location. Soreness soon localized in lower right quadrant. This soreness became so severe that he walked in a stooped position. Sought medical advice and was told that he had appendicitis. He took laxatives and light purges of his own volition during this interval. Stools were loose and frequent, but he attributed this to laxatives. No blood or mucous was noticed in stool. The discomfort and soreness was not relieved.

Physical Findings—Young man, fairly well nourished. Height, 66 inches; weight, 115 lbs.; estimated-temperature, 99°; blood pressure, 110-80; respiration, 18; apparently not acutely ill. Skin and mucous membranes normal on inspection. No bony deformities noted. Head of normal shape and contour. Pupils equal and react to light. Good oral hygiene present. Throat negative.

Chest—Normal in shape, with good expansion. Heart presents no irregularities, no murmurs or friction sounds heard. Lungs—No rales or areas of dullness noted.

Abdomen—Not unusual on inspection. Liver, kidneys and spleen not palpable. No masses palpable, but there was a notation on chart that in lower right quadrant the examiner was suspicious of early abscess formation. There

was a distinct rigidity of muscles on right side. Tenderness was pronounced over McBurney's point. Pressure here causes pain in epigastric region. Deep pressure with sudden release causes a sickening throb as described by patient.

Genitalia essentially negative—Reflexes normal.

Laboratory Report—Urine yellow, clear, alkaline, S. G. 1.014—Albumin, negative. Sugar, negative. No cast. No blood. Few epithelial and pus cells. Blood count, white cells 11,900. Lymphocytes, 18%; large mononuclears, 20%; polynuclears, 56%; all segmented; esinophiles 4%; and basophiles 2%. Coagulation time 6½ minutes.

Properative Diagnosis—Sub-acute appendicitis. Operated 11-10-38—Ethylene gas. McBurney's incision. Free, clear fluid encountered in abdomen. Appendix retrocecal and moderately inflamed. Distal end of ileum presented itself (4 inches) as hard indurated tube like mass, dark red in color, covered in spots by a grayish exudate. It seemed to stick into caecum without involvement of caecum. The lumen of affected segment was very small. The mesentery was indurated, congested and studded with lymph nodes.

Appendectomy was done by the usual purse string method, and closed without drainage.

Post-Operative Diagnosis—Subacute appendicitis and regional enteritis.

Pathological Report—Appendix 6cm by 5mm. Lumen almost occluded. Serous membrane smooth. Sections from appendix show a definite reaction to an inflammatory process. There is quite an accumulation of leucocytes through-out the walls.

Diagnosis—Appendicitis, subacute, grade-2.

He was given the usual post-operative care, plus cololysate and later neoprontosil (orally.)

Recovery was uneventful. Peak temperature of 100°, at end of twenty-four hours which subsided to 99° the next day, then normal the remainder of hospital stay.

He was discharged on 6th post-operative day with instructions to continue neoprontosil indefinitely.

A follow-up of this case will be given a little later.

Summary

Regional enteritis is a condition so rare that many men of mature years and with wide experience may not have seen a case, and on the other hand, common enough to have been seen early in one's experience.

History—If one searches the literature it will be noted that as far back as 1806 Combe & Saunders reported a case which well could have

* Read before the Sixty-sixth Annual Session, Arkansas Medical Society, Little Rock, April 16, 1941.

been this condition. At intervals since then one will note reports of cases with descriptive evidence of similar conditions. However, it was not until 1932 when Crohn, Ginsberg and Oppenheimer published their observations that so wide an interest was created. Since that date, much has been written and our conception of the condition has been somewhat modified. Still there are many points about which there is a wide divergence of opinion.

For the sake of brevity let us discuss this condition from the standpoint of the early lesion or acute phase, and the later lesions or the chronic phase. By the early lesion, we mean from the earliest symptom to and including a definite and typical condition where we find the terminal, as a rule, portion of the ileum as a soggy to firm, reddened, edematous, greatly thickened mass, somewhat resembling to touch, a pyloric stenosis.

By the later phase we include those lesions where there is a distinct ulceration, incomplete obstruction and later abscess and fistulae formation. The case reported belongs to the former group.

As to etiology there are many theories. There is no material difference in frequency as regards sex. Occupation apparently is no factor. It is more frequent in young adults. Practically every bacteria which inhabit the intestinal tract have been isolated from the lesions. The similarity of the lesion with those of tuberculosis have led some investigators to the belief that tuberculosis is perhaps an etiological factor. However, I do not believe that the tubercle bacilli have been found as a causative factor. Bacterial toxins and viruses have been advanced as a cause. Also the different groups of protozoas, allergy, foreign bodies and trauma have been advanced. So, it is to be concluded that so far as etiology is concerned there is perhaps yet much to be learned.

Symptomatology (Acute phase)—Briefly these may be summarized as those of acute appendicitis, i.e., evidence of peritoneal irritation, namely, pain in lower right quadrant, nausea and sometimes vomiting, fever, tenderness, moderate leucocytosis and muscular spasm. The temperature may be out of proportion to the leucocytosis. A mass may or may not be palpable.

Symptoms of Chronic Phase—These are divided into three groups indicating the advancement of the lesion.

1st. Those of ulcerative enteritis with colicky pain, intermittent diarrhea with stools containing mucous and blood, malaise, loss of weight, anemia, intermittent fever, and a palpable mass.

There is usually a history of remission of symptoms.

2nd. Symptoms of incomplete intestinal obstruction which is due to a thickening of wall and stenosis. We would expect to find severe abdominal cramps, borborygmus, visible peristalsis and a mass.

3rd. Chronic fistulae due to a slow perforation of ulcer, or from drainage of abscess. It may communicate with any of the hollow viscera, rectum, vagina, or through abdominal wall.

The diagnosis is made from above symptomatology plus x-ray examination which will give you significant evidence. There will be found a delay in motility, together with a dilatation proximal to affected segment. There will be demonstrated the so-called "string sign" due to the stenosis present.

Gross Pathology—When the abdomen is opened, you encounter a clear fluid. The appendix will be but little, if at all, involved. The thickened segment will be found to be a soggy edematous; blotchy, reddened mass. The serosa will have a roughened granular appearance due to tubercle-like formations. There will be evidence of inflammation, i.e., swelling, redness and stiffened bowel. There will be edema and inflammation of the mesentery with lymph gland hyperplasia.

Treatment

The treatment may be conservative or radical. Both have many proponents. But since there are many cases on record which have been followed long enough to justify the conclusion that there has been a spontaneous recovery, and since the radical treatment can be carried out when the condition justifies and demands, it seems only logical that the conservative treatment should be tried upon those cases seen during the early phases. Conservative treatment consists of a bland non-irritating high vitamin, high-calorie diet, easily assimilated. Neoprontosil has been used with apparent success in the treatment of chronic ulcerative colitis as reported by Bennick, Brown & Foster, *Journal of the American Medical Association*, Aug. 27, 1938, and Brown, Harrell & Barger-Proceedings staff meetings, Mayo Clinic, Sept. 7, 1938, and in later reports by these same writers in 1939. One might be justified in using it. Just what part it played in the case reported I am unable to say. If diagnosis is not made until the abdomen is opened, I believe the consensus of opinion is to remove the appendix and close without drainage, as drainage is thought to enhance the chances for fistulae formation. The treatment of the

chronic lesion, of course, is radical surgery, using ileo-colostomy with wide resection later or both procedures at one stage.

Follow-Up of Case Reported

Two and one-half years have elapsed since operation. He has returned frequently for a check. For past two years he has had no digestive disturbance. He returned recently for X-ray study. A barium meal was given and films made at two, three, four, and six hours. In none of these was there any evidence of obstruction. The string sign and the usual dilatation of proximal ileum were both absent. The caecum and colon were free of any abnormalities. There was no delay in motility as all of the barium was in the colon in six hours. His excellent appearance, freedom of symptoms and X-ray findings lead me to believe this boy is well despite the fact that two and one-half years might be too early to be positive.

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THE PRESENT STATUS OF SULFONAMIDE THERAPY*

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The choice of the right derivative of the sulfonamide group must be made in the treatment of nearly every infection today. While there is a difference of opinion in some cases, the diseases in which certain derivatives are of definite benefit are gradually being separated from those in which there is little or no benefit.

Hundreds of sulfanilamide derivatives have been synthesized and tried, but only the five sulfonamides discussed in this article have proven highly effective. These are: sulfanilamide, sulfapyridine, sulfathiazole, sulfaguanidine and sulfadiazine.

Before choosing a derivative of the sulfonamide group for treatment of a certain disease, it is wise to know something about the absorption, utilization, and excretion of each, since each derivative presents a different pattern. The following is a brief discussion of these patterns.

Pharmacology^{1, 13}

Sulfanilamide is rapidly absorbed from the gastro-intestinal tract, and rapidly excreted by the kidneys if kidney function is normal. The highest blood levels are found at the end of four hours, after which the blood level gradually falls until all of the drug is excreted at the end of twenty-four hours. It is therefore necessary to administer the drug every four hours in order to maintain the highest concentration in the blood. Effective blood concentrations for severe infections are 10-15 mgms. per cent, and for moderately severe infections 5-10 mgms. per cent. Sulfanilamide saturates the tissues in about the same concentration as the blood, and readily passes into the spinal fluid in about three-fourths of the blood concentration.² This makes it an excellent drug to treat certain types of meningitis.

Sulfapyridine is irregularly absorbed both in the same patient, and in different patients. The blood levels are therefore different depending on the amount absorbed. This sometimes makes it necessary to give the drug intravenously as the sodium salt. Blood levels of from 4 to 6 mgms. per cent are considered effective.¹⁴ The drug is hard to excrete by the kidneys since there is a considerable amount of the insoluble acetyl salt formed which may block the kidneys by crystal formation, produce hematuria, or even renal cal-

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culi. Sulfapyridine reaches the spinal fluid in about one-half the concentration of the blood.

Sulfathiazole is rapidly absorbed, and rapidly excreted by the kidneys. It is more rapid than sulfanilamide in this respect.¹³ Blood levels are not maintained long at a high level due to its rapid excretion. Effective levels seem to lie between two and six mgms. per cent.¹⁴ Only about one-third of the drug in the blood reaches the spinal fluid. This makes it a poor drug to use in meningitis. However, the drug has been used intrathecally with report of a cure in staphylococcal meningitis.¹³ Sulfathiazole is a much better drug than sulfapyridine for the body both to absorb and excrete. However, a certain amount of crystal formation may take place in the kidneys if plenty of fluids and alkalies are not given.

Sulfaguanidine is a peculiar drug in that it is very soluble in the gastro-intestinal tract but is poorly absorbed. Only low blood levels of from 2 to 5 mgms. per cent are reached. Its effects are thought to be due to the combined local effect in the intestinal tract plus the effect from the blood. The small amounts absorbed into the blood are excreted by the kidneys. It is of very low toxicity.¹⁵

Sulfadiazine has only recently been released for general use. It is somewhat less rapidly absorbed than either sulfanilamide, sulfapyridine, or sulfathiazole.³⁵ It is also somewhat less rapidly excreted, but its acetyl salt is more easily excreted, even in the presence of kidney damage.³⁵ This may mean that it will be the best drug to use where kidney damage is present. Blood levels of from 6 to 9 mgms. per cent are considered effective. Due to its slow excretion perhaps, blood concentrations of the drug may be raised to high levels, and if the blood levels are not followed, they may become unnecessarily high. To prevent this, it is recommended that the drug be administered every four hours during the first 24 hours following the initial dose, and then every six hours thereafter. Sulfadiazine passes over into the spinal fluid in about two-thirds to four-fifths of the blood concentration.³⁵ Therefore it is very effective in meningitis.¹⁷

Dosage

Long and Bliss have shown that in order to bring the levels of the sulfonamides up to their most effective concentrations in the blood rapidly, it is necessary to give a large initial dose of these drugs.¹ Thereafter, in order to maintain this level, it is necessary to give the drug every four hours, since this is the peak level for each one. The dosage varies depending on the type

of infection and its severity. The following is a suggested initial dose for an adult weighing 150 pounds with a moderately severe infection: Sulfanilamide 60 to 90 grains, sulfathiazole 45 to 60 grains, sulfapyridine 45 to 60 grains, sulfadiazine 60 to 75 grains, and sulfaguanidine 60 to 90 grains. Children require larger doses than usual for their age.

The maintenance dose is 15 to 20 grains every four hours, day and night, with the exception of sulfadiazine where, after 24 hours, the dose should be given every six hours. In most cases, it is recommended that large amounts of water, and sodium bicarbonate, two to three drams, be given in 24 hours.

Sulfanilamide can not be given intravenously but can be given subcutaneously in an .8% solution of normal saline, or can be given by rectum in about a 1% solution of saline. Sulfapyridine, sulfathiazole and sulfadiazine can be given intravenously as the sodium salt in a 5% solution of distilled water.

Mode of Action

No one has yet satisfactorily explained the mode of action of the sulfonamides. It is however generally thought that they stop the growth of susceptible bacteria but do not kill those already present. It is thought too that the body acts in some way to facilitate the action of the drugs. The sulfonamides then are bacteriostatic but not bacteriocidal.²

Choice of Derivatives

Before a derivative is chosen, wherever practicable, the type of organism causing the infection should be isolated by bacteriological studies, if possible. This oftentimes is life saving; for example, in pneumonia, a streptococcal infection will yield much more readily to sulfanilamide than to sulfapyridine.

Sulfanilamide

Sulfanilamide is the drug of choice in all **hemolytic streptococcal infections**,^{8, 10} unless sulfadiazine proves more effective later.¹⁶

Puerperal infections: Hemolytic streptococci are thought to be responsible for from 65 to 85 per cent of puerperal infections. Colebrook and Kenny,³ and others, by using sulfanilamide in 1936 and 1937, reported that they were able to reduce their mortality rate in puerperal infections from 23 to 8 per cent. Where septicemia was present, sulfanilamide reduced their mortality from 71 to 27 per cent. Where other organisms than hemolytic streptococci were responsible, their results were variable. Other derivatives might be more effective here.

Erysipelas: Hoyne⁴ of Cook County Hospital reduced the mortality rate in erysipelas from 12 to 2.4% by the use of sulfanilamide alone. He found it more effective than erysipelas antiserum where the mortality rate was 7.2%.

Scarlet fever: The results with sulfanilamide in treatment of scarlet fever are not outstanding. It is thought to decrease the incidence of complications especially those of otitis media and cervical adenitis.⁵ It does not, however, decrease the fever, or shorten the course of the disease.⁶ It has no effect, of course, on the toxemia of the disease. Where severe toxemia is present, it is still necessary to use the antitoxin. An effective combination in severe cases might be the combined use of both sulfanilamide and antitoxin.⁷

Meningitis: The mortality rate from streptococcic meningitis has been reduced from 95% to 20% by the use of sulfanilamide.^{18, 8, 10} In **Meningococcic meningitis**, sulfanilamide has reduced the rate from 50 to 13%.¹⁸ It seems to be as effective without serum here as it is with the use of serum.¹⁸ It is important in treating any type of meningitis that drainage of the focus of infection, if any, be instituted as soon as possible, for example, middle ear, or sinus.^{8, 10}

Other streptococcic hemolytic infections: All upper respiratory infections, such as tonsillitis, otitis media, pharyngitis, etc., yield to sulfanilamide provided B-hemolytic streptococci are the predominating organism.^{8, 10} These infections are frequently due to other organisms, or to mixed infections, in which case other derivatives might be more effective. In **streptococcic pneumonia**, **septicemia**, and **osteomyelitis**, sulfanilamide is the most effective drug available.^{8, 10}

Other infections not due to hemolytic streptococcic: In **subacute bacterial endocarditis**, which is due generally to streptococcus viridans, the results with sulfanilamide and other derivatives have been disappointing.⁴⁰ There have, however, been a few recoveries reported in proven cases, 6% out of 200 cases.⁹ The sulfonamides are the best drugs available here. There have been some reports recently with the combined use of the sulfonamides with heparin,⁴¹ an anticoagulant, the theory being that heparin would prevent the formation of blood fibrin around the vegetative growths. Severe reactions have been reported, and at present this treatment is not advised.

In **urinary tract infections** due to Group B hemolytic streptococci and bacillus proteus, sulfanilamide seems to be more effective than other

derivatives.¹⁰ It is the best derivative in the treatment of **chancroids**, **lymphogranuloma venereum**, and **trachoma** of the eyes.¹⁰

Diseases favorably influenced by sulfanilamide:¹⁰ Favorable reports have appeared in the use of sulfanilamide in the treatment of actinomycoses. Dodson¹¹ and others of San Francisco report three cases of apparent cures. In **undulant fever**, sulfanilamide appears to influence favorably, or cure the acute case, but has little effect on the chronic case. In certain types of **ulcerative colitis**, the drug is effective.¹⁹ In infections due to types of streptococci other than the hemolytic strain, the results with sulfanilamide are quite variable and often very unsatisfactory.¹⁰

Sulfapyridine

The dramatic cure of the **pneumococcic pneumonias** by sulfapyridine is one of the outstanding contributions of the sulfonamides to medicine. The mortality rate has been reported generally to have been reduced from 25 to 50%, to less than 10% by the use of sulfapyridine.²¹ The need of pneumococcic antiserum has been reduced greatly.^{12, 20} Because it is a much less toxic drug, however, sulfathiazole has now practically replaced sulfapyridine in the treatment of the pneumococcic pneumonias.^{14, 25} The results are practically the same, although sulfathiazole is a slower acting drug, and probably not quite so powerful a pneumococcicide. There is less nausea, vomiting, hematuria, or crystal formation in the kidneys. There is, however, some hematuria and crystal formation with sulfathiazole, particularly if plenty of fluids and alkalies are not given.

While most pneumococcic pneumonias respond well to either sulfapyridine or sulfathiazole, all cases will not respond and it is necessary to supplement sulfonamide therapy with type specific antipneumococcic serum. If the sputum has not been typed before sulfonamide therapy has been instituted, pneumococci will be exceedingly difficult to find in the sputum after the drug is started. It is, therefore, important that a specimen of sputum be collected before therapy is started, and if typing is not practicable at once, the specimen should be refrigerated for future possible typing in case there is no response to drug therapy in 36 to 48 hours. A blood culture should be taken before therapy is started, if possible, since more intensive treatment is generally necessary if the culture is positive.

While sulfathiazole is the drug of choice in the pneumococcic pneumonias, sulfapyridine is the best drug in all other pneumococcic infec-

tions, such as **pneumococcic mastoiditis**, **meningitis**, **otitis media**, **peritonitis**, and **acute sinusitis**. It is considered the best drug to use in **gonococcal endocarditis**, **gonococcal ophthalmia**, and **female gonorrhea**.¹⁰

In the treatment of **staplococcic**, or **pneumococcic meningitis**,^{23, 24} sulfapyridine is the drug of choice since sulfathiazole does not reach the spinal fluid in sufficient concentration to be effective.²² Since sulfapyridine is oftentimes irregularly absorbed, the blood levels should be studied, and if insufficient, the drug must be given intravenously as the sodium salt.

Sulfathiazole

Sulfathiazole is considered the best drug to use in all **staplococcic infections**, such as **carbuncles**, **cellulitis**, **osteomyelitis**, and **pneumonia**.^{10, 22}

In **staplococcic septicemia**, the results have not been so encouraging as at first reported. It is, however, the best drug to use here, and the mortality rate has been cut in half as compared to the rate before its use.^{26, 27, 28} It is imperative that the focus of infection feeding the blood stream be drained as early as possible, in cases where one is present.

In the treatment of **male gonorrhea**, sulfathiazole is perhaps the drug of choice, but sulfapyridine is equally effective although more toxic.²⁹ In **female gonorrhea**, sulfapyridine still seems to be the favorite¹⁰ although it may be replaced by sulfathiazole later. Both sulfathiazole and sulfapyridine are considered much more effective drugs in the treatment of gonorrhea than sulfanilamide.

Local Use of Sulfonamides in Wounds

Sulfanilamide, sulfathiazole and sulfapyridine have been reported effective in the prevention and treatment of **wound infections** by local application.³³ Sulfathiazole seems more effective than sulfanilamide, and sulfapyridine is less than either of these.³³ A combination of both sulfathiazole and sulfanilamide is highly effective.

In experimental **gas gangrene**, sulfathiazole locally, or a mixture of sulfathiazole and sulfanilamide, are most effective in prevention, and antiserum is most effective in treatment.³¹ Local sulfonamide application seems more effective than oral medication.^{30, 31, 32} These drugs may be used locally in a saturated solution, or in powder form, without damage to the tissues.³³

Sulfadiazine

Preliminary reports indicate that sulfadiazine is just as effective as other sulfonamides in the treatment of **pneumococcic**, **staplococcic**, and **streptococcic pneumonias**, **meningococcic men-**

ingitis, **acute infections of the upper respiratory tract**, including **sinusitis**, and **erysipelas**. It seems to be very effective against **B-coli infections** of the urinary tract, and in **acute gonococcal arthritis**.³⁴

The main advantages of sulfadiazine over the other derivatives is that it is a much less toxic drug. There is less nausea, vomiting, drug fever or rash. The levels of the drug in the blood are higher. It is excreted apparently with less damage to the kidneys, and its insoluble acetyl salt seems more easily excreted.^{10, 34, 35}

Sulfaguanidine

Sulfaguanidine has been reported as effective in **acute bacillary dysentery**. Marshall³⁶ of Johns Hopkins and Lyon³⁷ of West Virginia report a total of 40 proven cases, in which the drug shortened the duration of the fever, and checked the diarrhea, in the majority of the cases. In **surgery of the large bowel**, **pre- and postoperative use** of sulfaguanidine is thought to prevent complications of peritonitis, and to permit rapid healing of the sectioned bowel.³⁸

The drug has been used in many other infections of the intestinal tract, but the results have not been conclusive.

It is of low toxicity, producing very little nausea, vomiting, drug rash, or fever.

Diseases in Which the Sulfonamides Are of Little or No Value¹⁰

The following diseases are not favorably influenced by the sulfonamides: Influenza, common colds, rheumatic fever, typhoid fever, malaria, tuberculosis, non-hemolytic streptococcic infections, anaerobic streptococcic infections, tularemia and chronic sinusitis.

Contraindications

There is no contraindication to the use of the sulfonamides except a previous history of sensitivity to any of these drugs.¹⁰ Before starting therapy, the physician should inquire about the previous use of any of the sulfonamides and reactions, if any. A patient sensitive to one derivative is likely sensitive to another. The cautious use of small doses at first may be tried in these individuals with later larger doses if no reaction.

An existing anemia, leukopenia, hepatitis, or nephritis, is no contraindication unless these patients are sensitive to sulfonamides too. These patients, of course, must be more closely watched and checked than others.¹⁰

Toxicity^{1, 8, 10}

Toxic symptoms from the sulfonamides may be divided into (1) mild, (2) moderate, and (3) severe.

The **mild symptoms** are the most frequent. These consist of nausea, vomiting, cyanoses, mild psychoses, and acidoses. These symptoms are produced most often by sulfanilamide and sulfapyridine.

Of the **moderately severe symptoms**, drug fever and drug rash are the most frequent. These usually make their appearance from the fifth to the ninth day after therapy is started. The rash is usually scarletinoform or morbilliform. It occurs most frequently with sulfanilamide and sulfathiazole where it is present from 5 to 10 per cent of the time. **Hematuria** occurs about 8 per cent of the time from sulfapyridine, and 2½ per cent from sulfathiazole. **Crystal formation** and **calculi** occur most frequently with sulfapyridine.

When the above moderately severe symptoms occur, it is necessary to stop the drug at once, and begin forcing fluids and alkalis. These symptoms will usually clear up without damage.

Slowly developing hemolytic anemia may be classed as a moderately severe symptom and occurs about 3 per cent of the time with sulfanilamide. It may not be necessary to stop the drug here if the anemia is not too rapidly progressive. Transfusions may be necessary, however, if severe infection is present and drug therapy needed badly.

Severe toxic symptoms are fortunately rare, occurring 2 per cent, or less, of the time. The earliest and most alarming toxic manifestation is **acute hemolytic anemia** which occurs within 24 to 72 hours after therapy is started. The fever and pulse rise rapidly, and there is a rapid onset of pallor and icterus followed by jaundice. The urine and feces become dark colored due to excess urobilin. There is a marked **increase** in the white count with a marked **decrease** in the red cell count and hemoglobin. Occurring most frequently with sulfanilamide, this is perhaps the most dangerous of all the severe toxic symptoms since there is less time to do anything for the patient. The drug must be stopped immediately and frequent transfusions started at once. There is no way to predict this toxic manifestation, and it seems to occur in susceptible or sensitive individuals.

Acute agranulocytoses, unlike acute hemolytic anemia, does not usually occur until after the 12th or 14th day of drug therapy. While it is usually the most feared of all the toxic symptoms, it occurs less than 1½ per cent of the time. A **moderately** decreased white count with some **depression** of the granulocytes occurs not infre-

quently at the **onset** of sulfonamide therapy, but is not a contraindication to continuance of therapy. It must not be forgotten that a decreased white count and granulocyte count may be due to toxemia from the disease itself, and sulfonamide therapy, by combating the disease, may actually cause a rise in the count later.³⁹ Long and Bliss⁴² state that there have been no deaths reported in the literature from disturbances of the white cells within the first twelve days of sulfonamide therapy. The symptoms of true acute agranulocytoses usually manifest themselves at the end of the second week by a return of the temperature, increasing prostration, a sore throat, or sore gums, followed by ulceration. These symptoms should be highly suspicious and alarming to the physician. Blood counts should have been made before this time, but are certainly strongly indicated now. It might well be said that if blood counts are not done routinely during sulfonamide therapy, that at least after the tenth day they should be done.

Acute toxic hepatitis occurs usually in the second week of therapy. Jaundice develops without pallor. The feces are light instead of dark as in acute hemolytic anemia. The drug must be stopped at once when this symptom develops. It is due to the direct effect of the drug on the liver.

Precautions in Sulfonamide Therapy

All authorities agree that daily, or every other day, inspections of patients taking sulfonamides should be made. The onset of toxic symptoms can usually be recognized clinically, with the possible exception of agranulocytoses. Inspection of the skin, mucous membranes, conjunctiva, urine, and feces may reveal the type of toxic pattern. If the time at which certain toxic symptoms usually appear is kept in mind, they can usually be recognized earlier. During the first week, the mild symptoms of nausea, vomiting, cyanoses, psychoses, and acidoses appear. The most dangerous toxic symptom at this time is acute hemolytic anemia. During the second week, drug rash and fever, and toxic hepatitis appear. During the third week, acute agranulocytoses and slowly progressive anemia are most frequent.

Conclusion

Drugs of the sulfonamide group present certain patterns of absorption, utilization and excretion, and certain toxic tendencies. The choice of these drugs depends on these patterns, and the clinical experience which is now indicating that certain derivatives are best for certain diseases.

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TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

MORTALITY from tuberculosis has been quartered in forty years. This fact, however, reveals no accurate information regarding prevailing infection and morbidity rates. That they are less is too logical a deduction to be doubted, but their decline relative to that in mortality has been a matter of conjecture. The following report on autopsy findings throws valuable light on this question, especially since accurate studies extending over the past half century furnish the needed controls for comparison.

PREVAILING TUBERCULOSIS INFECTION RATE

In 1900 Naegeli published a careful report of 508 autopsies. Of the adults over 18 years of age 93% showed healed, inactive or active tuberculous lesions in the lungs. Only 17% of those under 18 yielded positive findings. Other investigators substantiated these findings and in the early years of this century the belief was prevalent that all adults had at some time suffered an invasion by the tubercle bacillus.

Opie as late as 1917 found positive evidence of infection in all of 50 autopsies on adults and in nearly 24% of a group of 93 children, the latter showing a far higher figure in the adolescent years. It was these findings that led Opie to remark, "Almost all human beings are spontaneously 'vaccinated' with tuberculosis before they reach adult life."

In 1922 Wason reported positive findings in 82% of his autopsies and in 1925 Lambert and de Castro Filho reported a rate of 72.8% in a large series from Brazil. As late as 1927 Todd still found evidence of tuberculous infection in 69% of autopsies done in Edinburgh on patients who had died of some cause other than tuberculosis. Such evidence indicates rather clearly that decline in infection rate has not kept pace with mortality from this disease.

The present study was carried on at the Washington County Hospital in Hagerstown from September, 1938, to August, 1940, all autopsies being performed by the same pathologist. There were 176 autopsies during this period which represented 45% of the deaths which occurred. Eleven of these were rejected because they were not complete postmortems

leaving 165 which are included in this report. Cases of active tuberculosis are not admitted to the hospital. The population of Washington County is semi-rural and most of the patients were long residents, from all classes of society and of the white race (only four Negro adults in the group).

Thirty-two of the 165 necropsies were done on children and 133 on adults. For the whole group positive findings were recorded in 65 or 39.4% which is just half of Naegeli's findings, 79.9%, when he included all ages.

Considering only the adult group of 133 cases, the positive evidence of infection yielded 47.4%, again strikingly near one-half the number of adults found to be infected by the earlier researches of Naegeli, Burkhardt, Opie and others. In this series there were five cases where infection was suspected but could not be proved pathologically. If these are included the percentage would stand at approximately fifty.

This finding of almost 50% of positive tuberculosis among an unselected group of a semi-rural population indicates that the frequency of tuberculosis is still sufficient to be alarming. If one assumes this experience as typical of the country as a whole, which seems reasonable, we must still face the fact that at least half of all adults have suffered invasions by the tubercle bacillus active enough to leave discoverable scars. This is disconcerting in face of the far greater fall in the death rate from the disease.

At the same time there is some compensation in the discovery revealed by this study that only one-half as many people who have suffered tu-

berculous infection actually die of the disease as was the case forty years ago. The infection rate has been reduced to 50%, the mortality to 25% of that in 1900. A number of factors have probably contributed to this gratifying preponderance in the decline of the death rate. Better sanatorium care and the management of cases has undoubtedly made a large contribution. The fact that lessening of the infection rate has apparently shown acceleration in the past 15 or 20 years brings comfort both to those engaged in the preventive and therapeutic aspects of tuberculosis control. A 50% reduction in the reservoir of spreaders must certainly mean that fewer contact cases are today submitted to massive and repeated doses of infected material. The contribution of compression therapy and surgery to this result can but be inferred. Those who advocate freer use of these measures certainly would seem to have little for which to apologize in the evidence presented by this study.

However, there are other factors in the picture which perhaps deserve first mention. Isolation is the time-honored scheme for the control of epidemic, infectious disease. It is a significant coincidence that during the period when tuberculosis mortality was reduced to one-quarter its 1900 level and infection rate cut by 50%, the sanatorium beds in this country increased from about 6,000 to 100,000. It would be idle not to recognize this prophylactic procedure as an outstanding influence in lessening opportunity for infection among the general public.

The result of this procedure would have been far more striking had it been possible to arouse the medical profession to its responsibility in finding the early case and effecting its immediate isolation. Unfortunately, this is one of the weaker links in our control program. From three-quarters to four-fifths of all cases admitted to sanatoria are still found to be in the advanced stages of the disease, already probable spreaders of the infection to others. More professional education, both undergraduate and post graduate is still needed to impress upon physicians how truly further progress in tuberculosis control rests in their hands.

Popular health education and school hygiene have also played their parts in reducing opportunities for infection. Beginning with teaching the infectivity of sputum, the transference of disease through common utensils, uncleanliness in restaurants, the menace of infected food handlers, instruction has proceeded to the point where even an open case is of relatively little

danger to his fellows if both he and they will exercise the prophylactic measures now recognized as largely effective.

Finally better housing, elimination of industrial hazards, more applied knowledge of the laws of nutrition, and a growing consciousness of the significance of personal and community hygiene, all have played their part in reducing the transmission of tuberculous infection from case to contacts.

A highly significant factor in this study is the observation that reduction of infection as shown at autopsy has been at least as rapid among infants and children as among adults. These younger members of society can make no personal contribution to their own protection. They must rely on that of others, nurses, teachers, parents and relatives. Cutting their infection rate in two as well as that of their elders is clear proof that a better informed public is making an increasingly effective fight against spread of this disease.

Frost in discussing the eradication of tuberculosis wrote as follows: "Tuberculosis also differs from the other directly transmitted respiratory tract infections in that its mortality has declined consistently for the last fifty years or more and continues to decline in every part of this country for which adequate statistics are available. It is not directly established by comparable statistical evidence that there has been a proportionate decrease in the prevalence of infective cases of the disease, taking into consideration not only the number of cases but duration of the open stage. However, there appears to be no good reason to doubt that the prevalence of open lesions effective in spreading the tubercle bacillus has diminished progressively, and continues to diminish in each considerable period of time."

However, it must not be overlooked that, according to present autopsy records, the reservoir of adults infected with tuberculosis at one time or another in their lives still amounts to half of the population. Therefore, tuberculosis can still flare up again whenever external conditions turn to the worse for the bulk of the people. Without such a reverse there exists the hope that further efforts in the campaign against tuberculosis will some day lead to a complete eradication of the white plague.

Frequency of Tuberculous Lesions at Autopsy by Kurt E. Lande and Georg Wolff, *Amer. Rev. of Tuberc.*, Vol. XLIV, No. 2, Aug. 1941.

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† In Military Service.

‡ Wife is an Auxiliary member.

The Roster of the Arkansas Medical Society has been placed in the center of this issue to permit its ready removal for filing.

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EDITORIALS

OBSTETRICAL CONSULTANT ON DUTY
WITH STATE BOARD OF HEALTH

Acting upon the recommendation of the Society as originally proposed by the Committee on Maternal and Child Welfare, the Arkansas State Board of Health has arranged for the services of Dr. Guy P. Slaughter as consultant in obstetrics. Dr. Slaughter will cover the state in the coming months addressing the physicians of the various communities on different phases of obstetrics. His first assignment was in five counties of southwest Arkansas. For the months of October and November he will be engaged in Benton, Crawford, Franklin, Logan, Sebastian and Washington counties. The services of the full-time obstetrical consultant are available, without cost, to the physicians of these counties during this period, and will similarly be available in other sections as visited. Physicians may freely call Dr. Slaughter for consultation, whether for private or charity patient. For the present his headquarters will be with the Sebastian County Health Unit at Fort Smith. Further announcement of areas to be visited by Dr. Slaughter will be made to the physicians in these given areas.

1941 MEMBERSHIP ROSTER

This issue of The Journal contains the roster of active, paid-up members of the Society as recorded in the secretary's office on October 20th. This year, as an experimental measure, the names of physicians whose wives are members of The Woman's Auxiliary to the Arkansas Medical Society have been indicated by a symbol. In addition, the names of those members known to be in the military service are specially designated. It is to be hoped that there are no errors in the roster, but should such be noted, the secretary's office will appreciate notification. It is quite likely that the names of all members in the military service have not been designated. The roster, as printed, gives the names of those where notice of entrance to military service has been sent to the office of the secretary.

DIAGNOSIS OF CARDIAC DISEASE

Members will shortly receive the pamphlet distributed for the Committee on the Heart, "Diagnosis of Cardiac Disease." This represents considerable work on the part of the Committee and is in keeping with its effort to make for more accurate records on heart disease in Arkansas. It is urged that all members who have to do with heart disease will familiarize themselves with the pamphlet. In case individual members do not receive their copy, another may be obtained on request to the state secretary. Comments on the pamphlet will be appreciated by the Chairman of the Committee, Dr. Alan A. Gilbert, Fayetteville.

EDITORIAL COMMENT

PROPOSED CONSTITUTIONAL
AMENDMENT

The following amendment to the Constitution was presented to the House of Delegates at the 1941 session and is published here as first notice to the membership.

ARTICLE VI

To amend the first sentence which now reads:
"The Council shall consist of the Councilors, and the President and Secretary, ex-officio."
To read:
"The Council shall consist of the Councilors, the President, the Secretary, the President-Elect and the Treasurer."

PROCEEDINGS OF SOCIETIES

The Third Councilor District Medical Society met in Jonesboro October 15th for the following program: Address of Welcome, H. H. McAdams, Jonesboro; Response, L. C. McVay, Marion; "Nocturnal Enuresis," J. C. Land, Walnut Ridge; "Care of the Simple Head Injury," Ralph M. Stuck, Denver; Address, H. Fay H. Jones, Little Rock; President's Address, L. D. Massey, Osceola; "Streptococci Infections with Case Report," Robert J. Haley, Jr., Paragould, and "Important Facts About the University of Arkansas School of Medicine and University Hospital," Byron L. Robinson, Little Rock. Luncheon was served at noon and the following officers were elected: President, R. C. Shanlever, Jonesboro; Vice-president, W. E. Ellington, Paragould. The Society will next meet at Tyrnza.

The Second Councilor District Medical Society met in dinner session at Batesville October 13th for the following program: Address, H. Fay H. Jones, Little Rock; "Surgery of the Colon," W. Decker Smith, Texarkana; "Fungus Infection," M. J. Kilbury, Little Rock; "Surgery of the Knee," F. Walter Carruthers, Little Rock.

Officers elected are: President, L. T. Evans, Batesville; Vice-president, M. C. Hawkins, Searcy, and Secretary-treasurer, O. J. T. Johnston, Batesville.

The Sebastian County Medical Society met October 14th for the following program: "Fractures," S. J. Wolfermann, and "Diverticulitis," Fred H. Krock.

W. F. Adams, Secretary.

The Arkansas Radiological Society was organized at a meeting held in Little Rock October 1st with the following members: Fred Hames, Little Rock; David LeVine, El Dorado; C. H. Nims, Hot Springs National Park; B. A. Rhinehart, D. A. Rhinehart, Little Rock; J. S. Wilson, Monticello, and W. R. Brooksher. Officers elected are: Fred Hames, President, and J. S. Wilson, Secretary.

The Tri-State Medical Society met in El Dorado September 23-24th under the presidency of R. B. Robins, Camden, who delivered the presidential address, "The Human Element in Medicine." The following Arkansas physicians were on the program: H. Fay H. Jones, Little Rock, "The Female Urethra," and O. C. Melson, Little Rock, "Treatment of Hypertension." S. A. Collom, Texarkana, was elected president, and

Joe B. Wharton, Jr., was elected vice-president for Arkansas.

The Fifth Councilor District Medical Society met in Camden October 9th for the following program: "Our American Heritage," John L. McClellan, Camden, and "Diseases of the Chest" (Medical and Surgical Symposium), Elliott Mendenhall and Robert Shaw, Dallas.

R. B. Robins, Secretary.

The Benton County Medical Society was addressed September 11th by Vincent O. Lesh, Fayetteville, "Fractures."

OBITUARY

EARNEST BURNETTE, Hattieville, age 59 years, died at his home September 13th. Born at the Burnette Grove community in Pope county, he graduated from the College of Physicians and Surgeons, Little Rock, in 1908 and had practiced in Pope county over thirty years. Surviving relatives are his wife, one son and three daughters.

NATHANIEL S. WORD, age 68 years, died at his home in Camden October 9th. Born near Bearden, he graduated from Memphis Hospital Medical College in 1900 and had practiced in Camden and Ouachita county since graduation. He had served as mayor and alderman in Camden and was chairman of the Ouachita County Democratic Committee for many years. Surviving are his wife and a daughter.

If they could talk, Council Seals would say:

"When you see one of us on a package of medicine or food, it means first of all that the manufacturer thought enough of the product to be willing to have it and his claims to **proved** ones, and that he will keep the Council-biased experts . . . We're glad to tell you that this product was examined, that the manufacturer was willing to listen to criticisms and suggestions the Council made, that he signified his willingness to restrict his advertising claims to **proved** ones, and that he will keep the Council informed of any intended changes in product or claims . . . There may be other similar products as good as this one, but when you see us on a package, you know. Why guess, or why take someone's self-interested word? If the product is everything the manufacturer claims, why should he hesitate to submit it to the Council, for acceptance? Mead Johnson Products are Council-Accepted.

COMING MEDICAL MEETINGS

Southern Medical Association, Saint Louis, November 10-13th.

Ninth Councilor District Medical Society, Harrison, December 10th.

PERSONALS AND NEWS ITEMS

The following have been appointed to Selective Service examining boards: Bruce Crow, Warren; J. H. Bohannon, Berryville; John S. Agar, Jos. F. Shuffield, C. R. Chestnutt and A. F. Gray, Little Rock.

New appointments to the University of Arkansas School of Medicine are: S. C. Fulmer, assistant dean; Chas. H. Lutterloh, instructor in medicine; A. C. Kolb, professor of neuropsychiatry; W. Myers Smith, assistant professor of public health, and E. M. Nixon, instructor in orthopedic surgery.

"Trachoma Problems in Arkansas" by K. W. Cosgrove, Little Rock, appeared in the October Southern Medical Journal.

F. Walter Carruthers, Little Rock, attended the sessions of the Clinical Orthopedic Society at Cleveland and Akron during October.

R. L. Smith has been appointed to the board of trustees of Arkansas Tech at Russellville.

J. B. Jameson, Camden, has returned to practice after an illness of two months.

S. B. Thompson, of Camden and Fairfield, Alabama, has been called to active duty with the army medical corps and assigned to Station Hospital, Camp Polk, Louisiana.

G. W. Reagan, Little Rock, addressed the Delta Medical Society at Greenville, Mississippi, October 8th on "The Medical Treatment of Kidney Infection."

Dr. and Mrs. L. G. Fincher, El Dorado, spent a recent vacation in Mexico.

A. F. Hoge, Fort Smith, addressed the Southeastern Oklahoma Medical Association at Poteau, Oklahoma, October 7th, on "Methods of Treatment of Cirrhosis of the Liver."

Neil Compton has been transferred from the Bradley County Health Unit to the Washington County Health Unit at Fayetteville.

Lt. Julius H. Hellums, formerly stationed with the Harbor Defenses of San Francisco, has been transferred to Fort Cronkhite, California.

W. C. Riggins has accepted appointment at the Hope Proving Ground.

Lt. A. R. Power, formerly stationed at Fort Riley, Kansas, has been transferred to the 48th Surgical Hospital, Fort Francis E. Warren, Wyoming.

J. G. Gladden, Harrison, S. M. Graves, Mt. Levi, G. L. Kimball, DeQueen, and S. J. Wolfermann, Fort Smith, attended the recent session of the Kansas City Southwest Clinical Society.

Lyle L. Hassell has resigned as director of the Faulkner County Health Unit and will enter private practice at Blytheville in partnership with J. M. Walls.

J. J. Monfort, Batesville, has been elected a Lieutenant-Governor, Mo-Kan-Ark District of Kiwanis Clubs.

W. B. Grayson, Little Rock, attended the sessions of the State and Provincial Health Officers in Washington and of the American Public Health Association in Boston during October.

L. L. Hassell recently addressed the Conway Rotary club on the services of the county health unit.

Dr. and Mrs. O. H. King, Hot Springs National Park, spent a recent vacation motoring in the New England states.

S. W. Chambers has moved into new offices at Mountain Home.

F. Q. Wyatt and Hickman Callaway have formed a partnership at Batesville.

R. T. Henry, Springdale, spent a recent vacation in Colorado.

Ralph E. Crigler, Fort Smith, attended the recent sessions of Kiwanis International at Excelsior Springs, Missouri.

C. B. May, Little Rock, recently took special work in dermatology at Johns Hopkins.

B. T. Kolb, Donaldson, has been appointed Selective Service examiner.

W. S. Kendall has moved from Strawberry to Cave City.

F. G. Engler, Little Rock, attended the Southern Psychiatry Association in Nashville during October.

F. C. Maguire, Blytheville, has been called to active service in the army medical corps and assigned at Camp Riley.

RANDOM THOUGHTS OF THE SECRETARY

September 23rd. With the Tri-State Medical Society today, enjoying El Dorado hospitality, which is something, even though we be under a cloud on the matter of publicity. The attendance is almost exclusively Arkansas' and we greet many a member from South Arkansas. To open house at D. E. White's with Joe Wharton as co-host, playing the slot machine for once on house money, which is kindly supplied after our own supply of nickels run out, but departing with headshaking over that ladder to the rumpus room. We know many a boy who would never get down after a session upstairs. Then to Berry Moores' where others are gathered and we find Margaret Robins with her astounding memory for names and faces acting as hostess here. Finally, in great rush to the station, eating in intense solitude in the snack car, while more fortunate ones seat themselves for what must have been a gorgeous banquet at the El Dorado Country Club. Sleeping with many a change of position to Little Rock and thence, more or less awake, driving 160 miles to home.

September 24th. Comes the tale of Foltz operating upon a woman this morning only to go downstairs after an interval and meet her, up and about in the hospital corridor. His mental processes return to a relatively normal rate when it is explained that this one is an identical twin.

September 26th. A circular letter tells of the NEW (?) Physical Culture magazine, "its whole spirit is dedicated to the sound science and normal development of Beauty and Health for the American woman." The publisher is certain that we will be glad to become a regular reader and will think enough of it to place it in our reception room. Well, such a metamorphosis on their part will precipitate a cataclysm in this office, if and when!!

September 29th. Today we look over the October, 1940, questions for registration of nurses in Arkansas and are astounded at number two on bacteriology: "Identify (a) Pasteur, (b) Koch, (c) W. B. GRAYSON! Comment from us seems hazardous, but we would like to see a compilation of answers to know what percentage were

able to identify "Bandy." After all these years, we are not certain of ourselves on that.

October 1st. In various centers today—Fayetteville, Searcy, Helena, Hot Springs National Park, Fort Smith—certain Advisory Committee members are a bit red-faced over the collapse of group hospitalization as executed by commercial interests. Perhaps a bit more advice, had it been sought, would have been of benefit.

October 3rd. We confess to mingled feelings over that nit-wit atop Devil's Tower today, having attained this unusual publicity by parachuting from a plane to its lonely peak. It was sufficiently awesome to us last August as we stood on the huge boulders at its base and we cannot begin to think what his reactions must be as he looks down along its fluted columns for a long, long six hundred feet. We only hope that no sane human loses his life in the attempt to bring this individual back to Wyoming's good earth.

October 4th. Having other plans for November 1st (regretting that we must miss seeing T. Duel Brown breezing on that date), we stoically face the rain for a Razorback-Horned Frog tussle. We do not wish to see any grandstand-quarterbacking, for even with the weather as it was, ours was a more comfortable lot than that of the Razorbacks.

October 11th. Tonight to Tulsa for the 1942 version of the Ice Follies, still our choice for brilliant beautiful entertainment.

October 12th. Lounging about the Tulsa Hotel, for a sort of home-town rendezvous, and with Wolfermann, relive some of the experiences of recent years in traveling the highways of Arkansas, neither of us sleeping on it on this occasion. In the afternoon to Claremore, where Oklahoma has erected a magnificent memorial to its beloved Will Rogers and an hour is easily spent in silent contemplation of the activities of this cowboy philosopher and humorist.

October 15th. With the First Councilor District at Jonesboro today, a fine gathering assembled at the good Hotel Noble. Greeting Dillman, of all people, off for a week's vacation; A. G. Henderson, Arkansas' oldest active practitioner yet with youth in his step and eye; A. F. Barr, who takes the floor and tells us; Willett, who manages to get away for his golf in the afternoon; Ira Ellis, whom we induce to pass on a few bouquets to the living, and many another good man from this section. Away at three for Memphis where it rains and prevents window-shopping, and so away on the Choctaw Rocket, having the unique experience of riding non-stop Little Rock to Booneville on the Rock Island.

October 17th. The life of a heckler is properly beset with confusion and comebacks as we find out at tonight's football game. Busily engaged in kidding Hardy Smith over being paged, we are startled but a few minutes later to hear the same speaker summon us for an "emergency call," which contributes greatly to the amusement of Smith, Jones and Blair and, in similar degree, to our harassment.

October 18th. To Little Rock for the "greatest show on earth," far from distinguished this year by the courtesy of its employees. We take this opportunity to wish the organization all that a discourteous personnel will bring it.

WOMAN'S AUXILIARY PAGE

MRS. RALPH CROSS, Publicity Secretary, Texarkana

In planning the recent trip to Mexico and its interior, I was not so apprehensive as was the American business man, who finding a business trip there necessary, wired Ambassador Josephus Daniels asking if it were safe to come. The Ambassador's answer is classic, "Perfectly safe, if you don't come by way of Chicago."

However, I must admit, that as "Mrs. Typical Tourist" on her first visit to Mexico, there were catalogued in my mind innumerable questions I felt must be asked and answered that I might have a clearer picture of that country across the Rio Grande invaded by General Winfield Scott just one hundred years ago.

As rural, sleepy, primitive Mexican villages presented themselves in various side trips, the paramount question in my mind was "how do these people who look so healthy survive infections that must come from conditions under which they live?"

I saw these Mexicans, a blending of Spanish and Indian blood, endure faulty diet, eat meats contaminated by innumerable flies and drink impure water. So inadequately housed were they in their dirt-floored, palm-atched bamboo huts, which had served as shelter for probably three or four generations. Is it any wonder at a people as these, living in the throes of intestinal disorder should be lacking in energy?

Shrines, such as the Shrine of Guadalupe, draw as always, concourses of maimed and afflicted. In the "Chapel of the Little Hill" the walls so completely covered with testimonials, attest to her healing powers. The bare-headed peon women with dirty, ill-kept babies wrapped in their rebozos, hungrily caress the glass case covering the image of the saint and with muttered prayers on their lips rub their hands again and again across their faces. Is there any wonder that contagions are uncontrollable?

What a need of elementary hygiene as an influence toward national health for these people!

I asked the guide what methods these primitive-like people used in treating their sick. There were the herb doctors, he said, with their numerous remedies, for instance, the tea of lemon leaves, tea simmered from rose petals. Tomatoes, he reminded me, are not eaten because they know that the seeds are the primary cause of appendicitis.

Throughout much of the plateau district of Mexico a specie of cactus is cultivated for the liquid it forms as sap. The sap is held in the tall, center stalk that bears the flower and from this it is extracted by being sucked into a gourd from which it is then poured into goat skins and taken to the mill for fermentation. In its native state it is known as "aguamiel," or honey water, has a saccharine flavor, and is considered of great medicinal value as a liver medicine. When this sap is fermented it becomes "pulque," the drink so widely consumed by the lower class inhabitants of the high country of Mexico.

A tree which recognized as having health producing qualities is the Nacahuira, their blossoms being the base for cough syrups and throat lozenges. Indians have known of the value of this shrub since time immemorial. There is always an abundance of fresh fruit which serves as a permanent part of their diet.

But, he reminded me, that not all Mexico is dependent on such primitive treatment of disease, there are villages which are enjoying the benefits of trained doctors, with

experimental schools for midwives and men desirous of becoming pharmacists. Mexico City boasts the new SALUBRIDAD, or Department of Health, just to what extent its influence will be felt has yet to be proven.

Its tubercular hospital and its leper colony, both of which are on the outskirts of town command recognition as among the best. So, though to the tourist, perhaps, certain sections seem to be merely marking time, the science of medicine is finding a place for the people, whom as one old Mexican remarked to me were taught only two things by the Spaniards, to be slaves and fight the bull.

—MRS. W. DECKER SMITH.

Dr. and Mrs. Geo. Parson, Texarkana, spent a recent vacation in South Carolina.

Mrs. Ralph Cross, Mrs. Wm. Hibbitts and Mrs. Allen Collom, Jr., Texarkana, attended a recent meeting of the Board of the Woman's Auxiliary to the State Medical Association of Texas in Dallas.

Mrs. M. G. Lawson has been elected corresponding secretary of the Bowie-Miller Counties Auxiliary.

Members of the Bowie and Miller Medical Auxiliary assembled in the first meeting of the current season at the home of Mrs. N. B. Daniel, September 26th, at which time Mrs. Calvin Churchill of Batesville, Ark., president of the Arkansas State Medical Auxiliary, was guest of honor. Hostesses, besides Mrs. Daniel, were Mrs. Decker Smith, Mrs. Louis P. Good, Mrs. L. H. Lanier and Mrs. Ralph Cross.

Mrs. Churchill made an instructive talk on work of the state auxiliary, stressing organization, health education, Hygiene, and use of the various periodicals of the auxiliary and medical society. She also told of the importance of health legislation and student loans.

Mrs. Allen Collom, Jr., presided over the business session and introduced five new members, Mrs. Bassett, Mrs. Lawson, Mrs. Routon (Ashdown), Mrs. Norman, and Mrs. Karlton Kemp.

The public relations meeting to be held October 24 was planned and announcement that out-of-town speakers from Austin and Little Rock will be here to participate on the program, which will be in the form of a "Nutrition Forum," considered definitely a part of the national defense program. In the past, the public relations programs have been outstanding successes.

For the social hour, guests were invited to the dining room, where the table was covered with an exquisite hand-made lace cloth and centered with a beautiful arrangement of red nerine lilies. The same flowers were used on the buffet. Mrs. Churchill poured tea and Mrs. Kitchens served salads.

In the living room, a lovely bouquet of gladioli, dahlias, and chrysanthemums, was placed on the piano.

In addition to those already mentioned, present were Mrs. W. V. Bessonette, Mrs. William Hibbitts, Mrs. C. E. Kitchens, Mrs. R. W. Pickett, Mrs. J. T. Robinson, Mrs. W. H. Dobbs (Foreman), Mrs. R. R. Kirkpatrick, Mrs.

T. F. Kittrell, Mrs. L. J. Kosminsky, Mrs. P. H. Phillips (Ashdown), and Mrs. M. G. Lawson.

Mrs. C. A. Churchill of Batesville, president of the auxiliary to the Arkansas Medical Society, will be guest speaker at the annual fall luncheon of the Hot Springs-Garland County auxiliary at the Arlington Hotel on Monday, October 20, at 1 o'clock.

Mrs. Euclid M. Smith is chairman of arrangements.

Plans for the luncheon were outlined by Mrs. E. L. Thompson, president of the spa auxiliary, at the first meeting of her organization for the new year Monday morning at the Chamber of Commerce Auditorium. Other plans for the year's work were also discussed. An announcement of committee appointments for the new year will be made at the fall luncheon, Mrs. Thompson stated.

The Washington County Auxiliary met in dinner session September 2nd. Subscriptions for 7 Hygeias were provided to county schools as a gift from the Auxiliary. Mrs. Fount Richardson reviewed "Value of Hygeia to the Medical Profession" and "Sabotage of Science."

Edna H. Hathcock, Secretary.

The Union County Medical Auxiliary gave a beautiful informal luncheon at the Garrett Hotel September 23rd at noon for the wives of doctors attending the Tri-State Medical meeting here.

Vari-colored summer blossoms formed the effective table decorations.

Mrs. S. J. McGraw gave the invocation and Mrs. J. B. Wharton delivered the address of welcome. Mrs. M. V. Russell presided at the session, which was devoted to roundtable discussion.

Guests included persons from Arkansas, Louisiana, Texas and Michigan.

Programs to be sponsored by the Women's Auxiliary to the Arkansas State Medical Society during 1941-42 were being formulated at a fall session of its Executive Board in the Albert Pike Hotel here October 1st.

Mrs. Churchill announced appointment of a Nominating Committee, to present next year's slate at the 1942 convention, as follows: Mrs. Alfred Hathcock, Fayetteville, chairman; Mrs. C. E. Kitchens, DeQueen; Mrs. R. C. Kory, Little Rock; Mrs. O. J. T. Johnston, Batesville; Mrs. O. A. Smith, Hot Springs.

Educational programs on nutrition and health, for participation in national defense, will be sponsored by the state and county medical auxiliaries as major activity projects the coming year. Plans were announced at today's sessions. The programs will be conducted in all sections of the state with each county auxiliary to sponsor talks by experts. They will be open to the public.

Mrs. N. B. Daniel, Texarkana, opened today's board session by giving the invocation. The session was marked by the attendance of eight past state auxiliary presidents as follows: Mrs. C. W. Garrison, Mrs. C. E. Oates, Mrs. B. A. Rhinehart and Mrs. J. B. Crawford, Little Rock; Mrs. Kitchens, Mrs. Hathcock, Mrs. W. R. Brooksher, Ft Smith; Mrs. Curtis Jones, Benton.

Mrs. M. E. Foster, Vice-President of the Sebastian County Medical Society Auxiliary, presided at a business session of the Auxiliary October 13th when the Auxiliary resumed its meetings after summer suspension. Mrs. Foster presided in the absence of the president, Mrs. Charles T. Chamberlain, who is out of the city.

The fall and winter schedule opened with a luncheon. Hostesses were Mrs. Fred Krock and Mrs. Carl Wilson.

Officers for 1941-1942 Auxiliary year assumed their duties. They are Mrs. Charles T. Chamberlain, president, to succeed Mrs. M. E. Foster, who automatically becomes vice-president; Mrs. B. L. Ware, Greenwood, secretary, succeeding Mrs. J. S. Southard; Mrs. J. L. Kellum, treasurer, succeeding Mrs. S. P. Stubbs.

The Auxiliary voted to contribute \$10.00 to the student loan fund, and to renew subscriptions for "Hygeia," sending complimentary to the Girls' Club, the Rosalie Tilles Children's Home, Young Women's Christian Association and the Carnegie Library.

Mrs. Foster announced the following committee appointments: Public relations, Mrs. T. P. Foltz, chairman, Mrs. C. S. Means, Mrs. H. C. Dorsey; Hygeia, Mrs. W. F. Adams, chairman, Mrs. I. F. Jones, Mrs. Carl Wilson, Mrs. G. G. Woods, Huntington; Telephone, Mrs. Fred Krock, chairman, Mrs. Ralph Crigler, Mrs. S. P. Stubbs, Mrs. Walter G. Eberle; Program, Mrs. J. S. Southard, chairman, Mrs. Mabel Scott, Mrs. H. H. Smith; Courtesy, Mrs. Everett Moulton, chairman, Mrs. C. S. Holt, Mrs. Merle Woods, Huntington; Health, Mrs. D. W. Goldstein, chairman, Mrs. J. E. Stevenson, Mrs. S. P. McConnell, Booneville; Cancer Control, Mrs. S. J. Wolf-ermann, chairman, Mrs. W. R. Brooksher, Jr., Mrs. B. B. Bruce, Alma, Mrs. C. W. Hall, Greenwood; Legislation, Mrs. A. A. Blair, chairman, Mrs. A. F. Hoge, Mrs. Minnie U. Fuller, Magazine; Publicity, Mrs. W. F. Rose.

Mrs. W. J. Nelson and Mrs. Kenneth Thompson were guests of the Auxiliary. Members present were Mrs. Everett Moulton, Mrs. D. W. Goldstein, Mrs. W. R. Brooksher, Jr., Mrs. Sidney J. Wolfermann, Mrs. J. L. Kellum, Mrs. J. S. Southard, Mrs. W. F. Rose, Mrs. B. L. Ware, Greenwood; Mrs. C. W. Hall, Greenwood; Mrs. B. B. Bruce, Alma; Mrs. G. G. Woods, Huntington.

Mrs. W. F. Rose,

Publicity Chairman of the Auxiliary of the Sebastian County Medical Society.

BOOK REVIEWS

The Care of the Aged (Geriatrics): By Malford W. Thewlis, M. D., Attending Specialist, General Medicine, United States Public Health Hospitals, New York City; Attending Physician, South County Hospital, Wakefield, R. I.; Special Consultant, Rhode Island Department of Public Health. Third Edition, entirely rewritten with 50 illustrations. St. Louis: C. V. Mosby Company, 1941. Price \$6.00.

Doctor Thewlis, the author of this work, is today recognized as one of the outstanding specialists in geriatrics in this country. Along with Nasher, Thewlis is credited with much of the pioneer work which established geriatrics as a legitimate and necessary branch of medicine. Spurred by scientific interest as well as by a deep sympathy for the aged, he has given to the medical profession in this work the result of many years of study

COUNTY SOCIETIES

OF THE

ARKANSAS MEDICAL SOCIETY, 1941

COUNTY	PRESIDENT	ADDRESS	SECRETARY	ADDRESS
ARKANSAS	E. B. Swindler	Stuttgart	R. H. Whitehead	DeWitt
ASHLEY	G. W. Fletcher	Montrose	J. T. Herron	Hamburg
BENTON	Geo. M. Love	Rogers	M. W. Chastain	Bentonville
BOONE	Ulys Jackson	Harrison	J. G. Gladden	Harrison
BRADLEY	W. B. Reasons	Hermitage	W. J. Hunt	Warren
CARROLL	D. K. McCurry	Green Forrest	A. L. Carter	Berryville
CHICOT	W. J. Hutson	Eudora	W. J. Schwarz	Lake Village
CLARK	H. A. Ross	Arkadelphia	Joe W. Reid	Arkadelphia
CLAY	W. J. Blackwood	Rector	J. E. McGuire	Piggott
CLEBURNE	J. T. Matthews	Heber Springs	J. C. Barnett	Heber Springs
CLEVELAND	Junius Ruth	Rison	W. G. Hancock	Rison
COLUMBIA	J. F. Rushton	Magnolia	L. A. Longino	Magnolia
CONWAY	J. F. Halbrook	Plummerville	C. R. Williams	Morrilton
CRAIGHEAD-POINSETT	M. E. Blanton	Jonesboro	M. L. Cantrell	Marked Tree
CRAWFORD	J. M. Stewart	Van Buren	J. L. Post	Van Buren
CRITTENDEN	T. S. Hare	Crawfordsville	L. C. McVay	Marion
CROSS	Ruffin Longest	Wynne	T. A. Peterson	Wynne
DALLAS	H. A. Cheatham	Princeton	J. E. M. Taylor	Sparkman
DESHA	C. H. Kimbro	Tillar	Gibbs Biscoe	Dumas
DREW	J. S. Wilson	Monticello	J. P. Price, Jr.	Monticello
FAULKNER	L. L. Hassell	Conway	J. S. Westerfield	Conway
FRANKLIN	W. H. Gibbons	Ozark	Thos. Douglass	Ozark
GARLAND	F. Jarrell	Hot Springs	W. E. Gray	Hot Springs
GRANT	R. M. Kelly	Fort Bliss, Tex.	John Cole	Prattsville
GREENE	J. A. Dillman	Paragould	E. D. McKelvey	Paragould
HEMPSTEAD	J. E. Gentry	McCaskill	Jim McKenzie	Hope
HOT SPRING	M. D. Prickett	Malvern	B. T. Kolb	Donaldson
HOWARD-PIKE	E. V. Dildy	Nashville	H. H. Holt	Nashville
INDEPENDENCE	J. J. Monfort	Batesville	W. J. Ketz	Batesville
JACKSON	E. L. Watson	Newport	J. B. Ivy	Tuckerman
JEFFERSON	Fred Hames	Pine Bluff	A. R. Russell	Pine Bluff
JOHNSON	J. M. Kolb	Clarksville	G. R. Siegel	Clarksville
LAFAYETTE	F. E. Baker	Stamps		Lewisville
LAWRENCE	T. Z. Johnson	Walnut Ridge	J. B. Elders	Walnut Ridge
LEE	C. W. Chaffin	Moro	N. C. Hodge	Marianna
LINCOLN	C. W. Dixon	Gould	L. T. Taylor	Star City
LITTLE RIVER	E. R. King	Ashdown	J. W. Ringgold	Ashdown
LONOKE	E. S. Whaley	Carlisle	O. D. Ward	England
MADISON	N. J. Hill	Hindsville	Fred Youngblood	Huntsville
MILLER	L. H. Lanier	Texarkana	J. W. Burnett	Texarkana
MISSISSIPPI	J. T. Polk	Keiser	F. D. Smith	Blytheville
MONROE	E. D. McKnight	Brinkley	W. L. Boswell	Clarendon
MONTGOMERY	J. B. Steuart	Norman	J. H. McLean	Caddo Gap
NEVADA	J. B. Hesterly	Prescott	L. J. Harrell	Prescott
OUACHITA	H. F. Thompson	Bearden	R. B. Robins	Camden
PHILLIPS	E. Kultgen	Elaine	H. H. Rightor	Helena
POLK	B. H. Hawkins	Mena	J. G. Hilton	Mena
POPE-YELL	J. K. Grace	Belleville	B. R. Teeter	Russellville
PRAIRIE	W. J. B. Williams	Des Arc	J. C. Gilliam	Des Arc
PULASKI	E. H. White	Little Rock	T. D. Brown	Little Rock
RANDOLPH	J. R. Loffis	Pocahontas	M. A. Baltz	Pocahontas
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in the field of geriatrics. Thewlis states that geriatrics is based on three fundamental principles: (1) that senescence is a physiologic entity like childhood and not a pathologic state of maturity; (2) that disease in senescence in a normally degenerating organ or tissue is not a disease such as is found in maturity, complicated by degenerations; (3) that the object of treatment in senescence should be to restore the diseased organ or tissue to the state normal to senescence and not a restoration to the condition normal in maturity. The book is divided into five sections. General considerations are taken up in Section I; miscellaneous medical problems in Section II; specific infectious diseases in Section III; non-infectious diseases in Section IV; pathologic conditions in old age in Section V. Treatment is outlined for conditions found in old age. Some diseases, such as pernicious anemia, tuberculosis, and certain others, are discussed because physicians have overlooked their frequency in senescence. Each chapter may be read independently. The general practitioner should find this volume, very readable and most stimulating.

Infantile Paralysis. By Philip Lewin, M. D., F. A. C. S., Associate Professor of Bone and Joint Surgery, Northwestern University Medical School; Professor of Orthopedic Surgery, Cook County Graduate School of Medicine; Attending Orthopedic Surgeon, Cook County and Michael Reese Hospitals; Consulting Orthopedic Surgeon, Municipal Contagious Disease Hospital, Chicago. Illustrated by Harold Laufman, M. D. 372 pages with 165 illustrations. Philadelphia and London: W. B. Saunders Company, 1941. Price \$6.00.

This well-written volume with excellent illustrations is an excellent reference work for those physicians who are especially interested in the disease.

Synopsis of Diseases of the Heart and Arteries. By George R. Herrmann, M. S., M. D., Ph. D., Professor of Medicine, University of Texas, Galveston. Second edition. Pp. 468, with 91 illustrations. Price \$5.00. Saint Louis: C. V. Mosby Company, 1941.

This is a concise book and of value to all who deal with cardiovascular diseases. The chapter which discusses the cardinal signs and symptoms of heart disease is especially well written. By following this outline, the general practitioner will be better able to determine the condition present, whether cardiovascular or not. The chapter on electrocardiography is of less interest to the general practitioner. Cardiovascular syphilis does not seem to have deserved attention.

Necropsy. By Bela Halpert, Assistant Professor of Pathology and Bacteriology, Louisiana State University School of Medicine, and Visiting Pathologist, Charity Hospital of Louisiana at New Orleans. 75 pages. St. Louis: C. V. Mosby Co., 1941; cloth.

This book is presented as a guide for students of Anatomic Pathology. The work presents the principles of the method used by Ghon, and both topography and anatomy of the various organs is considered with special attention to the regional lymph glands and tributary blood vessels. Sample necropsy records are presented to illustrate the method of assembling and evaluating data.

This work should prove of particular value as a reference to the physician called upon to perform an occasional necropsy since the technique of performing a scientific and systematic examination is so lucidly presented, in the sequence in which the usual necropsy is performed.

Essentials of General Surgery. By Wallace P. Ritchie, M. D., Clinical Assistant Professor, Department of Surgery, University of Minnesota Medical School. Pp. 812. 237 illustrations. Price \$8.50. Saint Louis: C. V. Mosby Company, 1941.

This book is designed for the undergraduate student; to teach him the fundamental principles of surgery and the results of surgery in the treatment of various conditions. In general, the attitudes and practices of the University of Minnesota Medical School are presented. The author has the benefit of collaboration with other staff members. The chapter on urology by C. D. Creevy is outstanding. The book is recommended for all medical students and general practitioners.

The Story of Clinical Pulmonary Tuberculosis. By Lawrason Brown, M. D., late Director of Trudeau Sanatorium. Pp. 411. Price \$2.75. Baltimore: The Williams and Wilkins Company, 1941.

This is the story of clinical pulmonary tuberculosis compiled and edited from the notes of the late Dr. Lawrason Brown with supplemental notes from medical collaborators. This is a most interesting volume and one which will be read with enthusiasm by all who have contact with tuberculosis in any of its forms.

Dr. Colwell's Daily Log for Physicians. Price \$6.00. Colwell Publishing Company, Champaign, Illinois.

This durable, one-volume accounting system for physicians is most complete, efficient, and remarkably simple. We have observed its increasing use by the physicians of Arkansas and suggest that non-users give it a one-year trial to become convinced of its value.

Handbook of Communicable Diseases. By Franklin H. Top, A. B., M. D., M. P. H., Director, Division of Communicable Diseases and Epidemiology, Herman Kiefer Hospital and Detroit Department of Health, etc., with 7 collaborators. Pp. 682 with 73 illustrations and 10 color plates. Saint Louis: C. V. Mosby Company, 1941.

This is a handy reference work on communicable disease which presents not only diagnosis and treatment, but nursing care in addition. Physicians, medical students, public health workers and nurses will all find it most useful. The appendix lists tables including an outline for the treatment of early syphilis. Illustrations and color plates supplement the text.

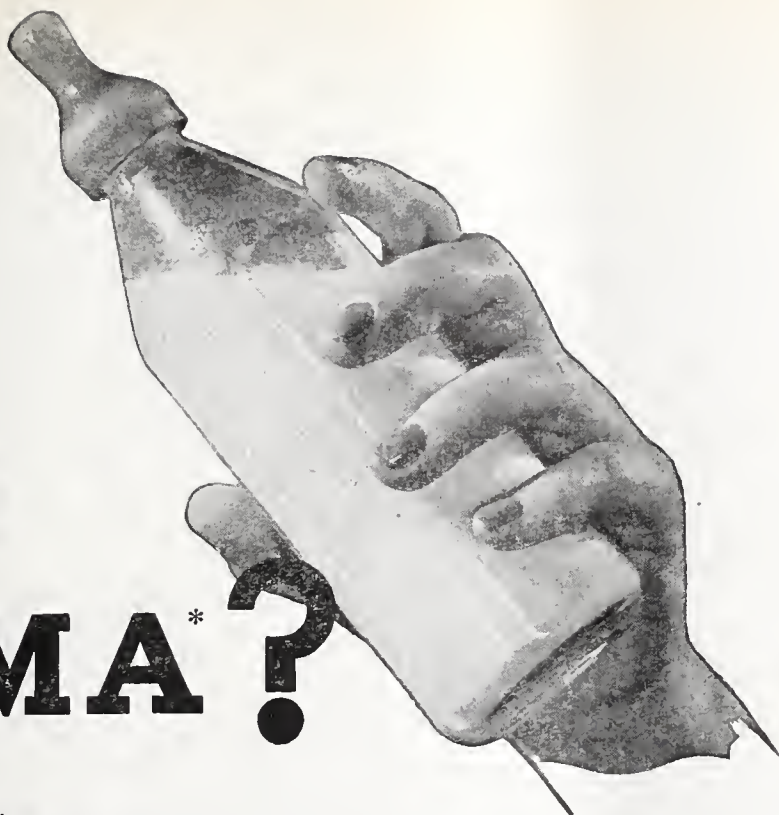
The Complete Weight Reducer. By C. J. Gerling. Price \$3.00. New York: Harvest House, 1941.

This is a glossary type discussion of the various elements which enter into overweight, discussing the various fads and fancies of weight reduction as well as appetite, alcohol and exercise.

Microbes Which Help or Destroy Us. By Paul W. Allen, Ph. D., Professor of Bacteriology and Head of the Department, University of Tennessee; D. Frank Holtman, Ph. D., Associate Professor of Bacteriology, University of Tennessee, and Louise Allen McBee, M. S., formerly Assistant in Bacteriology, University of Tennessee. Price \$3.50. Saint Louis: C. V. Mosby Company, 1941.

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From an Address before the Annual Secretaries' Conference, Indianapolis, January 27, 1935.

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No. 7

A RESUME OF FEVER THERAPY IN THE MANAGEMENT OF SYPHILIS *

KENNETH PHILLIPS, M. D.

Miami, Florida

Syphilis is an age old problem. It has taxed the attention of men and women in all walks of human life. The etiologic and pathologic nature of the disease is such that every branch of clinical medicine is called upon to further progress in its management.

Cooperative efforts between public health units and clinicians throughout the United States have revealed that much is still desired in the adequate control of the luetic problem. Reports from five of the large clinics (1) in this country devoted to syphilis, revealed that eighty-four per cent of the patients treated failed to remain under treatment sufficiently long to render them non-infectious. Strong social and economic forces operate to handicap patients from receiving adequate therapy. Educational campaigns launched by the United States Public Health Service will aid in overcoming some of these obstacles. Meanwhile, the general clinician must launch his own program in releasing these handicaps.

As for conventional chemotherapy, many syphilologists are not entirely satisfied with methods now in vogue. The long period required in early and late syphilis leads to difficulties in many instances. Moore (2) has well emphasized "Treatment is too prolonged, too painful, too dangerous and too expensive. Efforts of investigators to develop better and especially shorter methods of treatment should be encouraged."

Most workers are agreed that in the treatment of syphilis the combination of fever therapy and chemotherapy is superior in efficiency to either alone. Artificially produced fever therapy gained its advent in the treatment of central nervous system lesions and recent investigations have re-

vealed it to be a procedure of first rank in early syphilis.

Technical Considerations of Artificial Fever

Fever therapy as an established method dates back to the reports of Wagner von Jauregg (3). For the next decade or more it was produced solely by malarial or foreign protein inoculation. These methods of production carried with them certain deterrents, uncertainties and hazards well understood by all. They have now become largely replaced by physical apparatus by which the fever can be produced with greater ease and safety.

From the discovery by Whitney (4) in 1927 of the fever producing qualities of high frequency waves and the production of fever in man by Neymann and Osborne (5) in 1929 by the use of high frequency currents, there has been a progression of technical development. Most fever therapists are now beyond the crude experimental stage regarding apparatus, technical management, proper indications, etc., and have reached a rather common ground as to the physiologic principles involved. Lower temperatures and shorter treatment periods are gradually replacing the more prolonged and exhaustive technic. Maximum fever-hour dosage can thus be obtained with greater safety.

Our present technic in syphilis (all stages) consists of treatments of three to four hours each at temperatures ranging from 105.4 to 106 degrees F. In early stages, treatments are given at bi-weekly intervals until a maximum of 50 hours have been administered. In late syphilis the total number of fever-hours is dependent upon the individual case. While 50 hours may be set as a minimum it need no longer constitute the maximum. Cases of paresis showing only moderate improvement at the end of 50 to 75

* Read before the Sixty-sixth Annual Session, Arkansas Medical Society, Little Rock, April 14, 1941.

hours, have responded quite satisfactorily after 200 hours.

The arsenical is administered at the temperature peak. Should the drug be given only once weekly, bismuth or mercury can be safely given between each fever session. Follow-up management with chemotherapy is quite dependent upon the clinical and serological results obtained at the end of the fever course. Proper serological supervision regarding both blood and spinal fluid, of course, follows the conventional rules which have always applied. Quantitative blood studies (6), (7) become indispensable to those accustomed to their use.

Fever Therapy in Early Syphilis

We cannot as yet hope to apply fever to the mass management of early syphilis. This, however, is in no way based upon its lack of efficiency. There is considerable evidence to indicate that the combination of chemo-fever therapy is by far the shortest and surest method known in curing early syphilis.

Neymann, Lawless and Osborne (8) have demonstrated the destructive effect of even two

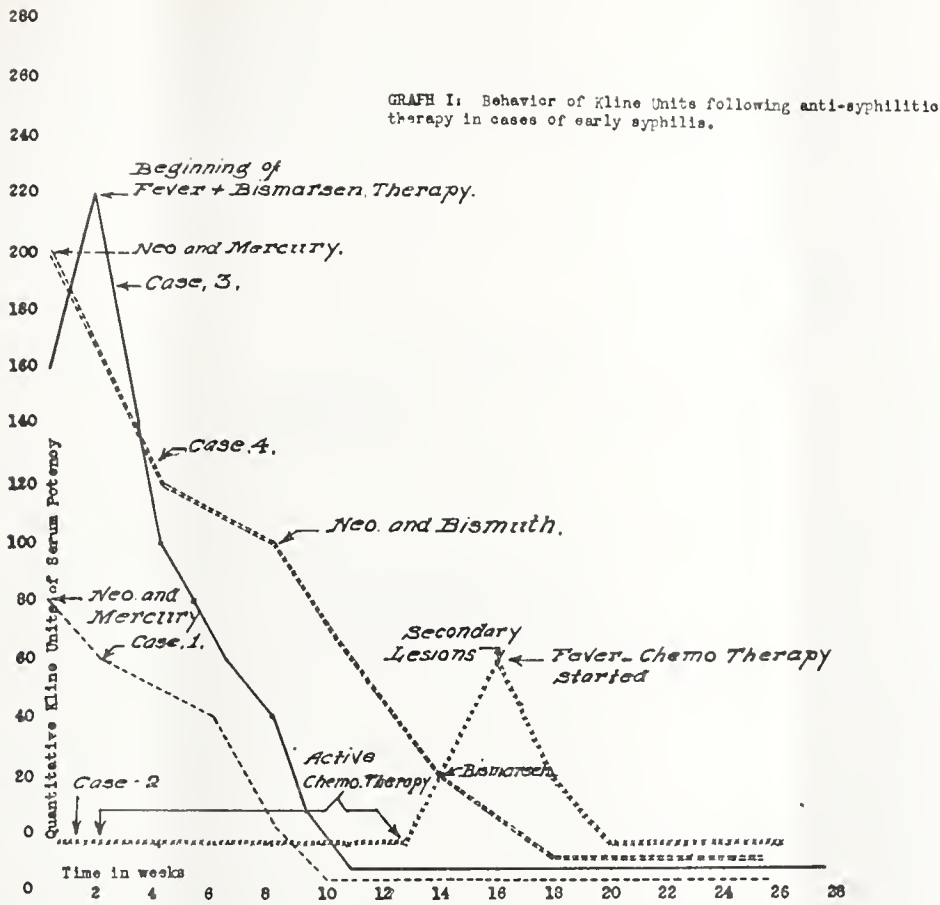
fever sessions upon the treponema in the primary chancre. Simpson and Kendall (6) have reported their results in various stages of the disease.

In our department since 1931, 62 cases of early syphilis have been observed for a period of over three years after treatment had ceased. They were classified as follows: Sero-negative darkfield positive, two; sero-positive primary stage, 22; sero-positive (Wasserman fast) secondary manifestations, 38. The two primary sero-negative cases promptly healed and have shown no signs of clinical or serological relapse under observation of three and five years respectively. Of the 22 cases with sero-positive primary syphilis, 12 had received extensive chemotherapy over periods of four to six months without reversal of serology. Following adequate fever-chemotherapy ranging from six to twelve treatments all except one were reversed to negative, the one remaining being reduced to a plus four (Kline) with four quantitative units. None have relapsed. The ten remaining had received no previous chemotherapy and under six to eight fever-chemotherapy sessions ob-

TABLE I

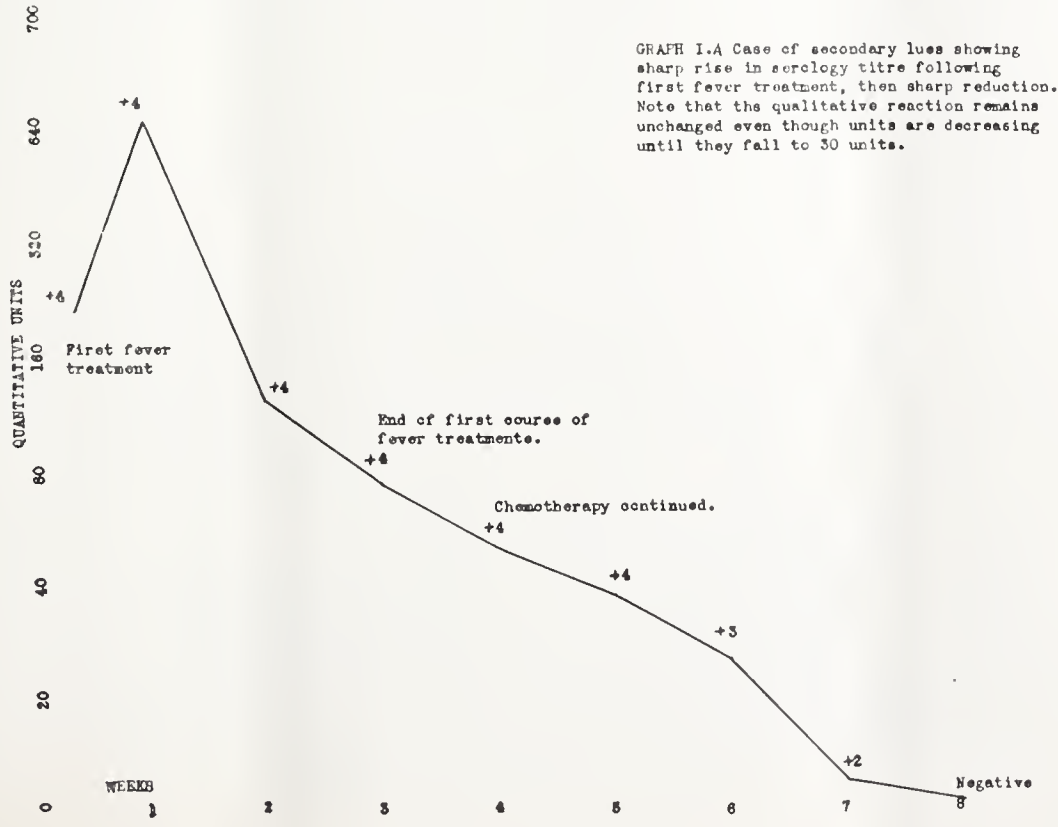
Showing the behavior of serology as expressed in quantitative units under treatment in various stages of syphilis.

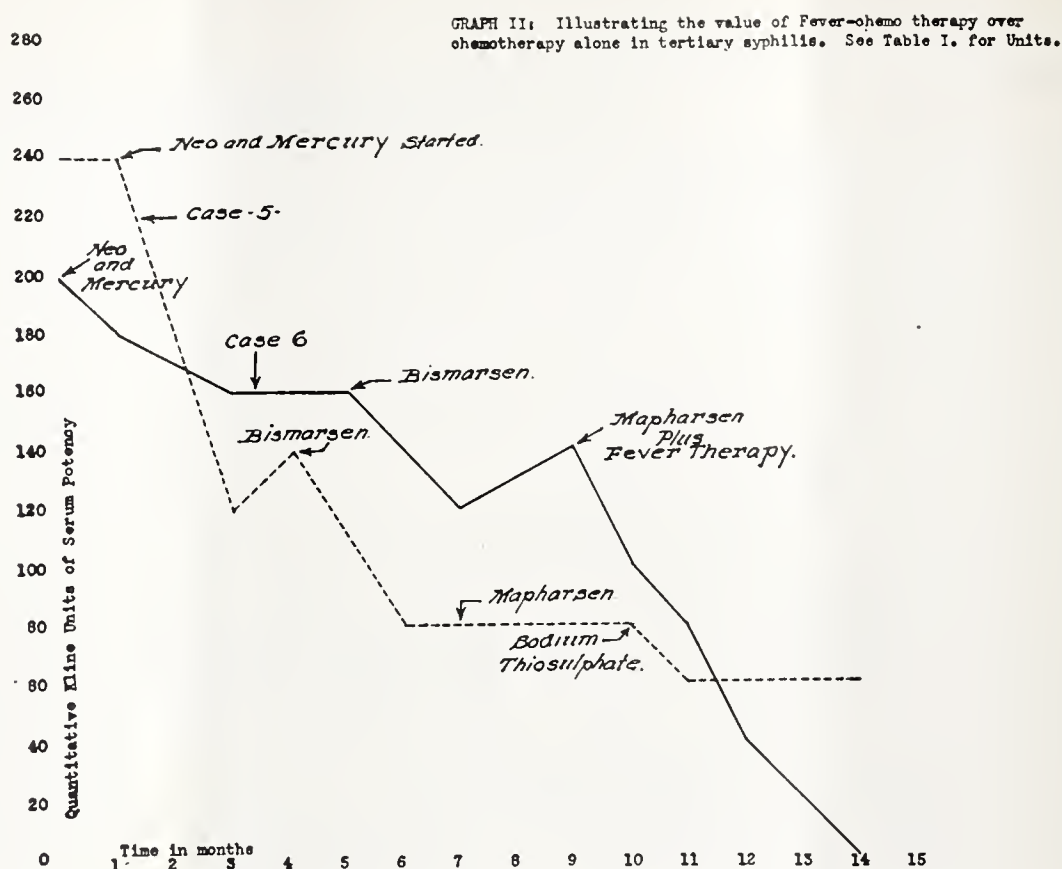
Case	Type	Dates	Kahn	Kline Diag.	Units	Treatment
3.	Lues II, Wasserman fast	1933-1937 12/13/37 2/7/38 3/1/38	+ 2, 20 Units Negative Negative Negative	+ 4 Negative + 2 + 2	40 0 0	After extensive chemotherapy. After six combined fever and chemotherapy Following 2 months rest
7.	Congenital	1933-1937 12/17/37 2/16/38	+ 4 + 3, 20 Units Negative	+ 4 + 4 + 4	8 4	After extensive chemotherapy After six combined fever and chemotherapy Following two months rest
8.	Paresis	1936 12/30/37 3/5/38	+ 4 + 3, 8 Units Negative	+ 4 + 4 + 3	8 0	After extensive chemotherapy After ten combined fever and chemotherapy Chemotherapy
10.	Paresis Cord bladder	1935-1936 5/1/37 12/29/37	+ 4, 360 Units + 4, 36 Units Negative	+ 4 + 4 Negative	360 36	After extensive chemotherapy After ten combined fever and chemotherapy After twenty combined fever and chemotherapy
12.	Primary penile chancre, 4 weeks	2/21/33 3/8/33 4/10/33 4/25/33 5/7/33		+ 4 + 4 + 4 + 1 Negative	80 60 40 0 0	2/21/33 to 4/10/33 ten chemotherapy treatments. Note reduction in units even though diagnostic test remained + 4. Bismuth given between each fever.
13.	Primary penile chancre. Darkfield positive.	12/27/36 1/25/37 2/27/37 3/17/37 4/3/37 4/25/37 5/29/37 6/12/37		Negative Negative Negative Negative Negative + 4 + 4 Negative	0 0 0 0 0 60 20 0	12/27/36 to 4/25/37 extensive chemotherapy. Serology increased to positive with 60 units regardless. Six chemo-fever therapy treatments given. Blood reduced to negative.
14.	Tertiary Gumma tongue	7/17/37 8/14/37 9/15/37 10/16/37 12/19/37 2/11/38 4/14/38 8/17/38 5/10/40		+ 4 + 4 + 4 + 4 + 4 + 4 + 4 + 4 + 4	240 180 120 140 80 80 60 60 40	7/17/37 to 10/16/37 extensive chemotherapy. Units began to increase in spite of active therapy. 10/16/37 to 8/17/38 twenty combined fever and chemotherapy sessions. Units reduced to 60 where they further reduced and still stand at 40 on 5/10/40, with no further change



tained reversal of serology with no relapse. The 38 cases with secondary manifestations were considered Wasserman fast since they had received extensive chemotherapy. Following adequate chemo-fever therapy, 16 cases (42.1 per cent) gave a reversal to negative in serology. The re-

maining 22 cases (57.8 per cent) while remaining positive in their qualitative serology, were sufficiently reduced in quantitative units (below ten) to render them clinically safe without further treatment. Within the ensuing three to five years observation period, 18 remained stationary,





both clinically and serologically, while in four cases quantitative units began to rise, upon which a second course of 50 hours of fever was given and all gave a reversal to negative.

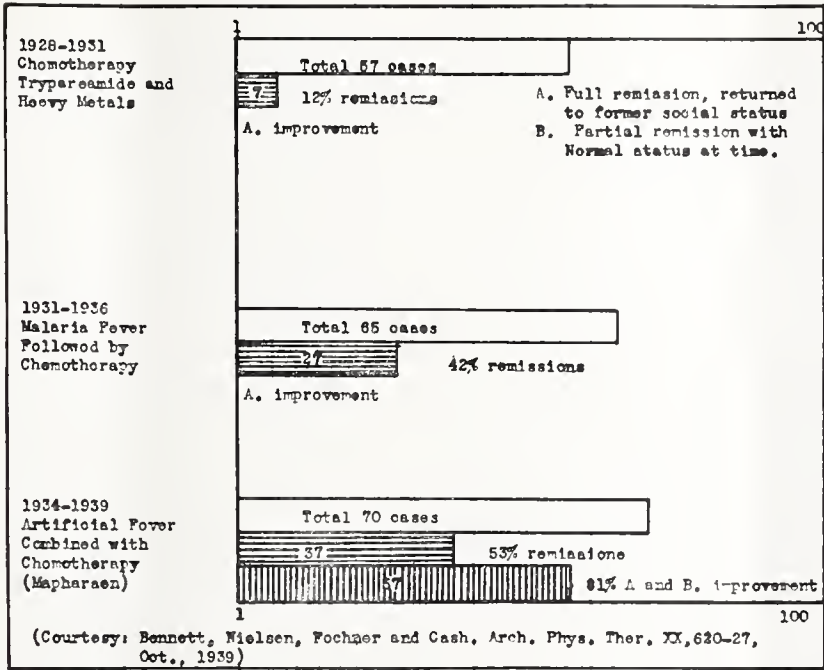
Quantitative blood studies in these cases are invaluable. Simpson and Kendell (6) reported their value in conjunction with the Kahn reaction, while Litterer and I (7) showed similar reactions with the Kline test. Thus it is recognized that two syphilitic patients both showing four plus may reveal entirely different titre reactions, one containing 80 units, the other only 20 units. A decline in quantitative units, regardless of any change in qualitative reaction, may be considered as progress both in therapy and safety from relapse.

The technic for quantitative determinations presents little or no difficulty. It consists (Kline reaction) of preparing a series of dilutions of the serum and testing each separately with the Kline diagnostic or exclusion antigen. The highest dilution giving a four plus reaction multiplied by four gives the number of quantitative units obtained. Pooled negative sera as the diluent is much preferred to physiological saline since the end point is more accurately determined. Table I and Graphs I, I-A and II reveal the application of the quantitative procedure in all stages of syphilis.

Fever Therapy in Late Syphilis

Clinical data is better established in this stage since fever therapy was first employed in this type. By simple reference to Tables II and III published by courtesy of Bennett, Cash and Fechner (9) and Ebaugh, Barnacle and Ewalt (10) much detailed discussion can be avoided. These reports are convincing that, in so far as paresis is concerned, artificial fever by physical means is superior to other methods. In cases of late symptomatic syphilis we have learned much of the value of fever therapy. These cases have called our attention to Kolmer's (11) views regarding tissue immunity. Also we now question or even doubt the conventional attitude that serological reaction is a true index to activity of infection or efficiency of therapy. In many of these cases of symptomatic syphilis with their cord bladder, parietic or tabetic manifestations, we see them clear clinically of their symptoms under fever therapy and remain free despite a persistent positive serology. Quantitative units usually steadily decrease, in spite of the diagnostic serology remaining fast, and even when the units have reached a maximum reduction, symptomatic improvement may continue for months after the course of chemo-fever sessions have been completed.

TABLE II. Comparative Incidence of Remissions from Various Forms of Therapy in Paretic Dementia at Hastings State Hospital



In four years prior to 1937, twenty patients with late symptomatic syphilis were given a complete course of chemo-fever treatment and placed under observation for a minimum of three years. Each patient received 100 hours divided over 20 treatments of five hours each. They were classified as general paresis, 12; tabes, 6; and tertiary lues with gummatous manifestations, 2.

Clinical results were as follows: Nine of the paretics (75 per cent) obtained complete remission and are still returned to gainful occupation and reliable social status. The remaining three obtained remissions with partial relapse. Of the six patients with tabes only two (33 1/3 per cent) received any striking relief from their symptoms. One of these recovered from a fully

developed cord bladder to one now retaining not over 15 cc of residual urine. The other now has almost complete control of motor function with a loss of abdominal crises. Both cases of gummata promptly healed and have remained free from recurrence for four years.

Only four cases of the entire twenty obtained a reversal in diagnostic serology and only six a reversal in spinal fluid. This problem is one of the most difficult of all in fever therapy. How can we evaluate a clinical cure in the presence of a persistent positive serology? How far dare we assume that relapse is not imminent?

Summary and Conclusions

While, at present, fever therapy does not lend itself to the mass management of syphilis, as

Table III. Colorado Psychopathic Hospital Clinical Results

	Artificial Fever combined with Tryparaamide		Therapeutic Malaria followed by Tryparaamide	
	Cases	Percentage	Cases	Percentage
Marked improvement -----	29	33.3)	13	18.0)
Improved -----	39	44.8)	35	48.5)
Unimproved -----	11	12.6	13	18.0
Died --				
during treatment ---	2	2.3	2	2.6
later -----	4	4.5	7	9.7
Deaths due to other causes	2	2.3	2	2.6
Total -----	87	99.8	72	99.4
	Followed 6 mo.--4½ yrs. average 2.9 yrs.		Followed 6 mo.--4½ yrs. average 2.8 yrs.	
SPINAL FLUID SEROLOGY:				
	Artificial Fever		Therapeutic Malaria	
Complete reversal -----	31 patients, or	35.6) percent	22 patients, or	30.5) percent
Partial reversal -----	24 patients, or	27.5) 63.1	14 patients, or	19.4) 49.1
Unchanged -----	24 patients, or	27.5 percent	25 patients, or	34.7 percent
Deaths -----	8 patients, or	9.1 percent	11 patients, or	15.2 percent
Total -----	87	99.7 percent	72	99.8 percent
(Courtesy: Ebaugh, Barnacle and Ewalt: J. A. M. A., 107:1031 (Sept. 26) 1936)				

further advances are made it will become more applicable to greater numbers. Based upon time required for clinical improvement, chemofever therapy is the most efficient treatment for syphilis now known. Its inability to reverse Wasserman-fast serology is still disappointing. It still leaves open the hazard of relapse. Quantitative blood studies are of invaluable aid in the proper evaluation of serological response. The units serve of equal value after treatment has ceased as a guide to clinical status. Increase in percentage of gain in our small series of paretics is, undoubtedly, due to the fact that only four of the twelve were of the advanced type. The contention for fever therapy in early syphilis may be challenged. Such opposition is mostly based upon points of economy and increased hazard. Neither will hold up under scrutiny of time saved and increased efficiency in therapeutic result.

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RELIEF OF PAIN IN AN APICAL LUNG TUMOR BY RESECTION OF THE CERVICAL SYMPATHETIC GANGLIA ON THE INVOLVED SIDE

MILTON BERRY BOWMAN, M. D.

Hot Springs National Park

I wish to present a case of apical lung tumor in which intractable pain in the arm of the involved side was relieved by the complete resection of the superior, middle, and inferior cervical sympathetic ganglia on that side. The procedure was suggested from the reading of the relief afforded victims of angina pectoris by Prof. Rene Leriche and Prof. Rene Fontaine of the University of Strasbourg by this operation.

I have chosen to use the term "apical lung tumor" rather than superior sulcus tumor which might be construed as a distinct entity as described by Pancoast. A perusal of the literature leaves me in great doubt as to whether such a distinct entity as a so-called "Pancoast tumor" exists, for it seems that many neoplasms occurring in the apex of the lung produce any one or group of signs and symptoms described as the syndrome of Pancoast. In order to refresh the reader's memory, these signs are as follows: (1) X-ray evidence of an apical tumor; (2) homolateral pain referred along the distribution of the

involved nerves of the brachial plexus; (3) atrophy of the small muscles of the hand on the affected side; (4) X-ray evidence of destruction of adjacent ribs and vertebrae. Any one or combination of the above symptoms and signs may occur in primary apical carcinoma, bronchiogenic carcinoma, intrathoracic sympathoblastoma, or tumors of the adjacent regions involving the brachial plexus.

The patient to be described suffered an apical lung tumor with involvement of, most likely, the eighth cervical and first thoracic contributory fibers of the medial cord of the brachial plexus. The sulcus is a groove running longitudinally to the vertebral column on either side. Tumors are usually situated at the upper pole, hence the name. Pain under the scapula is possibly due to involvement of the origin of the posterior division of the first, and perhaps, second thoracic trunks. The upper arm pain corresponds to involvement of the intercosto-humeral division of the second thoracic and that along the ulnar as-

pect of the forearm to the nerve involvement described at the first of this paragraph.

Pancoast thought these tumors possibly of branchiogenic origin but there are many who now believe that all pulmonary neoplasms are of bronchiogenic origin. Apical lesions other than epithelial carcinomata arising from embryonal branchiogenic rests may also produce the classical Pancoast syndrome, therefore the syndrome can hardly be regarded as a specific pathological entity among intrathoracic tumors. Frost and Walpaw described a case of intrathoracic sympathoblastoma, proven at autopsy, which presented the Pancoast syndrome.

The case to be reported corresponds to the majority of superior sulcus tumors in that the onset of pain preceded the diagnosis by approximately 3 or 4 months. Also there was X-ray evidence of destruction of a segment of the third rib, an apical tumor, and pain in the homolateral arm. However, at no time preceding the sympathectomy was a Horner's syndrome present, though this, of course, appeared post-operatively.

The operation was undertaken with no other thought than to obtain relief of pain. It was fully explained to the patient's family that the procedure was palliative and not therapeutic. Alcoholic injection of the 2nd, 3rd, and 4th paravertebral ganglia (thoracic) was first attempted but with very little relief to the patient. He was taken to a local hospital and his history and treatment is now presented in the following case report.

History—M. L. T., a forty-seven-year-old white male, was first seen on April 4, 1939, at which time he was complaining of a severe aching, burning pain located about the medial aspect of the right supra-scapular region. He had first suffered this pain in late December, 1938, at which time he had a mild herpes zoster. The herpes disappeared but the shoulder pain persisted from time to time and gradually became progressively worse as a severe, constant ache, preventing sleep and accentuated—by elevating the right arm. At his first visit this pain was already radiating to the right elbow causing the arm to feel numb and weak and to have a sensation of myriad pin pricks. He was taking codiene one-half grain and aspirin 5 to 10 grains almost every two hours for relief. About mid-March, 1939, he began to lose weight and in two weeks had lost 12 pounds. He did not have a cough, had never spat blood, nor did he have night sweats at any time. He did not believe that he had had fever.

The patient's appetite was good. He had passed small amounts of bright red blood in his stool on different occasions which he attributed to hemorrhoids. There was no complaint referable to the cardio-respiratory or genito-urinary systems.

The patient was married and had one daughter. There was no history of tuberculosis or neoplasia in the family.

He was an outdoor man employed by the Park Service and quite a hunter and fisherman. So far as he knew, he had been in excellent health until his present illness.

Examination—On inspection, the patient appeared gaunt and poorly nourished. The blood pressure in each arm was 98/70, pulse, 76/minute, full, strong, and regular. The pupils were somewhat constricted but were of equal size and responded to light and accommodation. Oral cavity essentially normal except for the fact that all teeth had been extracted. The neck was normal. No adenopathy was present. Thorax: On inspection, the thorax was bilaterally symmetrical anteriorly. There was no lagging nor were any abnormal pulsations or retractions noted. Posteriorly over the medial aspect of the right supraclavicular region appeared an elevation of the skin suggestive of an underlying mass. This elevation was about 8 cm. in diameter and approximately 1½ cm. above the surrounding surface. There was no dimpling of the skin nor any signs of inflammation. While the skin moved over the mass, the latter itself was not movable. On palpation, no tenderness was elicited. Percussion revealed dullness directly under the mass described but not elsewhere. Auscultation revealed no abnormal sounds. The heart was normal in all respects, and examination of the abdomen did not reveal any abnormality. Rectal examination was negative except for a few small internal hemorrhoids. The prostate was not enlarged and felt normal on palpation.

On examination of the extremities, there was a weakness of grip in the right hand. Several discrete nodes were felt in both axillae and in each inguinal region.

Laboratory Findings—Wasserman test was negative. Blood count was normal. Urinalysis: Acid. S. G., 1.018, Heavy trace of indican, many crystals, occasional hyaline cast and a few pus cells. X-ray: X-ray showed a thickening of the apical pleura. In addition there was noted a destruction of the vertebral end of the third rib for about one inch.

The patient was told that it might be possible for him to obtain relief of pain through removal of his sympathetic ganglia, but that the operation was being approached without certainty of what result might follow. He decided to submit to the proposed surgery and accordingly was admitted to St. Joseph's Infirmary where the proper preliminary preparations were made.

The day after his arrival in the hospital, April 19, 1939, an alcoholic injection of the 2nd, 3rd, and 4th paravertebral thoracic ganglia on the right was performed. This afforded some diminution in pain which was, however, so slight that the injection was regarded as of no value. Two days later, the cervical sympathetic ganglia (superior, middle, and inferior) on the right side were removed by the following technic.

Operation—The patient was given ¼ gr. of morphine and 1/150 gr. of atropine sulphate. He was taken to the operating room and placed in a supine position with the head turned to the left, thereby outlining the posterior border of the right sterno-mastoid muscle. The operative field was prepared and an incision was made through the skin, superficial fascia, and platysma from the mastoid process to the middle of the clavicle along the posterior margin of the muscle. Bleeders were clamped and tied with plain "O" catgut. The muscle was dissected forward by blunt dissection and retracted medially exposing the carotid sheath. The latter was dissected free by means of Mayo scissors and was retracted medially, exposing the pre-vertebral muscles upon which lay the sympathetic fibers. The sympathetic trunk was

identified and traced from inferior to middle to superior ganglion. Using a small pair of scissors, the communications of the various ganglia mentioned were interrupted and the entire trunk with the three ganglia were removed in one piece. The spinal accessory nerve, which had been easily identified, was preserved. Four interrupted sutures of plain No. 2 catgut were used to approximate the muscle, and a number of interrupted sutures of plain No. 1 catgut were used in the superficial fascia. The skin was closed with skin clips and a rubber-dam drain was left at the lower angle of the wound. The patient was returned to the ward in good condition.

The patient's convalescence from the operation was uneventful. On the first post-operative day, he remarked that the pain in his arm was gone. He was allowed to leave the hospital at the end of one week and was free of pain in the arm and shoulder for one month. He was given four deep X-ray treatments with no noticeable benefit. This lack of benefit is in keeping with most cases of lung tumor. He then began to suffer pain over the scapula and the top of the shoulder. An X-ray showed extension of the malignancy and destruction of the vertebral ends of the third and fourth ribs. The tumor mass seen externally above the scapula had increased in size. By early June the patient began to decline rapidly. There now appeared a small mass bulging forward through the infra-clavicular region of the right side. The patient's pain near the costo-vertebral angle increased so that narcotics were necessary. He eventually developed mental hallucinations and became difficult to control. No further X-rays were possible. In the second week of July, death occurred. A partial autopsy was permitted with the following findings:

Autopsy—A partial autopsy being granted by the patient's family, an incision was made down the middle of the sternum and the skin reflected backward. The chest plate was removed. It was found that the entire upper lobe of the right lung was replaced by a pinkish, moist, succulent mass which, when pierced by the knife, had the appearance of a sponge and from which came 500 c. c. of a thick sanguino-mucoid fluid. The mass had pierced the second rib anteriorly, and appeared behind the pectoral muscles. It had also perforated the posterior wall of the chest so that the entire tumor presented a dumbbell appearance. There was slight but definite enlargement of the hilar lymph nodes. The heart was not enlarged and the left lung was not involved. There was no evidence of metastasis to any of the abdominal organs. Sections were taken for microscopic study and a report was returned from the pathologist of adenocarcinoma of the lung.

Comment

The case recorded is interesting because of the signs and symptoms presented similar to those described by Pancoast, and principally because of the relief of the arm pain afforded by complete extirpation of the superior, middle, and inferior cervical sympathetic ganglia on the involved side.

Undoubtedly, there was extension to the vertebral column and very likely the terminal mental aberrations were due to possible cerebral metastases which have been so interestingly described by Kernohan in six cases. The metastasis, ac-

cording to the consensus of opinion of many writers, apparently occurs from the lungs to the brain by means of tumor thrombi and emboli through the blood stream. This has actually been seen at autopsy. This is only a supposition in this case as autopsy was not extended to the cranial cavity.

I do not wish to imply by this report that all cases will receive palliation from cervical sympathectomy. I merely wish to report the success of the experiment in this particular instance in order that it may be kept in mind as a possible help to a suffering patient.

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COMING MEDICAL MEETINGS

Ninth Councilor District Medical Society, Harrison, December 10th.

Annual Conference of Health Officers, Little Rock, December 12-13th.

TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

THE habit of calm appraisal, characteristic of English physicians seems not to be ruffled by the pressure of war emergencies nor by howling bombs. Tuberculosis work in England, though sometimes interrupted, continues to engage the earnest attention of physicians and laymen. American readers will profit by the clear analysis of S. Vere Pearson of the objects of collapse therapy in the treatment of pulmonary tuberculosis outlined in an address, "What Are We Aiming at in Collapse Therapy?", here condensed for the busy reader.

AIMS OF COLLAPSE THERAPY

The objects of treatment in pulmonary tuberculosis are fourfold: (1) to arrest the progress of the disease; (2) to heal the damaged tissues, (3) to restore the general health and working capacity of the patient, (4) to render him or her sputum negative. Often there is likelihood of clash between these objects and what to do is sometimes overshadowed by the question when to do it. The aims of collapse treatment for pulmonary tuberculosis may be surveyed under eight heads.

1. **The constitutional effects of this disease are of more importance than the local.** The constitutional symptoms, rather than damage to the lungs, endanger life and health. But the successful treatment of the local lesion is the way to allay the constitutional symptoms. The characteristic feature of the disease, a series of reactions in the connective tissues, only secondarily affects the functions of the breathing apparatus. It is the exudative lesions which produce the most dangerous symptoms and while we have yet to learn how the effects of collapse therapy work on them, it is these lesions which are most amenable to collapse therapy.

2. **Its chief characteristic is that it produces reactions in the connective tissues.** Aside from its effect on gross lesions, including cavities, collapse therapy produces ischemia, passive hyperemia and lymphatic stasis which encourage proliferation of connective tissues and the production of fibrosis in early lesions. It is well to emphasize this because too often collapse therapy is reserved for the patient with excavation and other gross lesions. The relaxation, the ischemia and the lymphatic stasis affect the diseased parts more than the healthy. But the

work of healthy lung tissues is eased because the function of the latter is interfered with less than it was, if the toxemia be lessened.

3. **Tubercle bacillus is master of the ceremonies nearly always.** It is a mistake to be apprehensive of secondary organisms within the lesions in the lung, for it is the tubercle bacillus which is the master of ceremonies. It is time the boggy of mixed infection was laid to rest. Only the tubercle bacillus is responsible not only for early infiltration of the Assman type (early round foci) or early excavation, but also for liquefaction.

4. **A re-expanded, healed lung should be our aim whenever and as far as ever possible.** This means that a reversible and temporary type of collapse is to be preferred whenever possible.

5. **The best induced collapse is always a selective one.** So-called "respiratory traumatism" (abnormal stretching of diseased parts) is based on the idea that the movements of respiration do harm to a diseased lung and that collapse treatment counteracts this harm by resting the lung. But on occasion collapse treatment may increase the harm, as for example when a stretched pleural adhesion attached viscally to the region of a cavity in the lung occurs in an artificial pneumothorax. It must ever be an aim of collapse therapy to amend and convert such a condition. The mechanisms which produce harm are those which increase the stretching of diseased parts. These we must discover with the aid of roentgenograms and, even more, by careful observations, on the screen, of respiratory movements. (Slow motion cinematography is being increasingly employed, says the author, to study respiratory movements.)

6. **It is obtained by relaxing tension of diseased parts.** This has long been emphasized but even now, when studying movements, during breathing and coughing too much attention is often given to cavities rather than to the influence of such movements upon the relaxation of other pulmonary tissues.

The movements of respiration affect the diseased parts of the lung either directly or indirectly—a distinction not always easy to make. The surrounding parts can be pulmonary or non-pulmonary and their effect upon the tensions within the thorax must be considered. Collapse therapy aims at relieving these and permitting relaxation. Perhaps even more important than expansion, contraction and movement of cavities is the effect of respiratory movements on the lung tissues surrounding and in proximity to a cavity.

7. **In dealing with cavities our aim is, of course, to get rid of them. Collapse plays a part in this by:**

- a. Closing the broncho-cavernous passage;
- b. Stabilizing and reducing intra-cavitary pressures;
- c. Starving and debilitating the tubercle bacilli on the cavity walls.

"It always strikes me," says the author, "that the hole in the lung has held far too much of the attention." Efforts to classify cavities have been useful but not inconclusive. We are often in doubt today as to the interpretation of an annular shadow. Mistakes are still made between a ring of fibrosis, a zone of reaction around a central focus and one of atelectasis. Even the supposed hole may be found to be no hole on post-mortem examination. There are other difficulties. Probably the best classification of cavities is that of Coryllos; open, closed and narrowed.

Early cavities disappear sometimes without any measure to relax anything. When a cavity does not close spontaneously, collapse therapy is used. Artificial pneumothorax would succeed more frequently if the suitable case was found earlier and proceeded with, especially if cauterization of adhesions were more popular. The excavated lung needs relaxation from without, by detaching it from the bony cage of the thorax; but air under too high a pressure within the cavity itself can keep the hole open, and if such air be absorbed and the compressed lung around the cavity re-expands it will fill the gap. This process is accomplished by getting the bronchial opening

blocked and may occur more or less by accident. Cavity closure after an ineffectual pneumothorax occurs fairly frequently and can be aided by a temporary phrenic operation, but the reason why the cavity closes cannot be explained. Closure may come about through a kinking of the bronchus draining the cavity though a case has been published in which a kinking had a disastrous effect. Our aim should be to know when a kinking has occurred, when it is benefiting the patient and how it has come about. We are far from this knowledge as a rule but able to form an opinion much more often than formerly.

There are several lessons which can be learned for collapse therapy from work in connection with Monaldi's method, namely, the trans-pleural decompression treatment of cavities. One of these has to do with the blocking of the cavity. When a cavity becomes blocked the oxygen is absorbed and the tubercle bacilli languish. There is good evidence to show that an aim of treatment should be to starve and debilitate the tubercle bacilli on the walls of the cavities. When that has been achieved it remains for means to be found to allow the pericavernous tissues, either by expansion or indirectly by their contractile powers, to close the cavity.

8. **The prevention of the discharge of the bacilli.** Cavities are the main, if not the only source of the expectorated positive sputum, augmenting the danger of bronchogenic spread and spread to other persons. An important aim of treatment, therefore, is to prevent the discharge of tubercle bacilli. But the restoration of health must come first; a well-trained ex-patient who behaves sensibly is not a danger. The restoration of the patient to work must not be forgotten in the desire to eliminate cavities and positive sputum.

Finally, our aims should always be based upon clinical and X-ray observations which should not be directed too exclusively to cavities nor to the lung condition. Collapse therapy is not purely mechanical. The many factors of the situation must be taken into account. Our knowledge of collapse treatment is advancing quickly and modifying our practice. That is the ever fascinating interest of medicine. As it progresses certain problems are solved, discussion about them ceases, but new ones arise.

What Are We Aiming At In Collapse Therapy? by S. Vere Pearson, M. D., *Tubercle*, July, 1941.

THE JOURNAL

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EDITORIAL

FEDERAL REHABILITATION PROGRAM

Press dispatches have carried announcements
of the intention of the Federal Government to
salvage selectees by remedial measures directed
to defects found on draft examinations. It has
been stated that 900,000 of the first two million
men examined were found to be physically or
mentally unfit. It is further estimated that fully
200,000 of these men can be made fit for full
active duty. Of the remainder, it is thought that
fully half can be restored to sufficient health as
to permit performance of limited military duty.

It is interesting to note the causes of disquali-
fication as given by the Selective Service System.
Dental defects accounted for rejection of 188,-
000 men or 20.9 per cent; defective eyes were
found in 123,000 cases, or 13.7 per cent, while
there were 96,000 cardiovascular cases, 61,000
musculo-skeletal cases, 57,000 venereal cases, 57,-
000 mental cases, 56,000 hernia cases, 36,000
cases of foot defects, and 26,000 cases of pul-
monary pathology, including tuberculosis.

Present plans, as announced, call for the
men to be treated by their local physicians and
dentists, who would be paid by the Federal gov-
ernment at rates to be set, presumably in coop-

eration with the American Medical Association
and the American Dental Association. No fur-
ther announcements have been made as to the
basis of remuneration and speakers from Wash-
ington at the recent conference of state society
secretaries in Chicago did not mention this item.

Such a program has many ramifications and
with the emphasis upon defense as now attends
almost every activity of governmental agencies
as well as that of many individuals, it becomes
most essential that common sense and clear
thinking attend the inauguration of such an inno-
vation in medical treatment.

EDITORIAL COMMENT

CHANGE IN PLACE OF MEETING FOR
1942 ANNUAL SESSION

The Miller County Medical Society regrettably
announces that it will be unable to entertain the
1942 annual session of the Society which had
been awarded Texarkana. This action has been
taken because of an unprecedented demand for
hotel rooms in Texarkana incident to defense
activities. The hotels were unable to guarantee
the Miller County Medical Society that space
would be available for the use of those attending
the annual session. Announcement of the new
place of meeting will be made in the January
issue of The Journal.

HISTORY OF THE ARKANSAS MEDICAL
SOCIETY

The Journal hopes to complete publication of
all data pertaining to the history of the Society
within the next two issues. In the meantime, the
Committee will appreciate corrections or addi-
tions which individual members may wish to offer.
Subsequent to final publication of the material,
arrangements will be made to publish the data in
book form provided sufficient requests for such
a volume are received from the membership.

1941 INCOME TAX

Members of the Society are urged to familiar-
ize themselves with all provisions of the 1941
Federal Income Tax Act. New and increased
taxes are imposed on all individual income, both
earned and unearned. Personal exemptions have
been lowered for individuals with and without
dependents. As in former years, the tax will be
payable in March, June, September and Decem-
ber of 1942. The Journal stresses the impor-
tance of proper and accurate records for all phy-
sicians in order that tax due may be computed
without delay and with a minimum of effort.

HAVE YOU THESE FACTS ON

Recent U. S. government reports indicate a considerable increase in cigarette smoking. As physicians realize, this is a natural development during times of public tension.

This situation, and the advent of recent and very significant research have greatly increased the interest of the profession in the subject of cigarette smoking.

Naturally, situations arise in which a physician may find it desirable to modify his patients' smoking hygiene. But in any case, the physician is concerned about the smoke itself, the principal carrier of physiologically reactive substances.

Scientific authorities in general agree that the constituent of cigarette smoke with the greatest physiologic significance is nicotine. Any reduction of this substance in a patient's smoking is considered desirable by most physicians.

When the modification of a patient's smoking is indicated, here are facts which should be of interest to you:

The makers of Camel cigarettes arranged for independent tests on 5 of the largest-selling brands of cigarettes. The rate of burning

CONSIDERED

CIGARETTE SMOKING?

and the nicotine content of the smoke of Camels were compared to the averages of the other brands tested.

The results paralleled the findings of prominent medical—scientific authorities.* Here is the most important conclusion:

THE SLOWER-BURNING CIGARETTE PRODUCES LESS NICOTINE IN THE SMOKE

This research also suggests that by advising patients to smoke slower-burning Camels, it is possible to reduce the nicotine content of cigarette smoke *without sacrifice of smoking pleasure*. Thus, the patient's cooperation is assured.

A RECENT ARTICLE by a well-known physician in a leading national medical journal** presents new and important information on this subject, together with other data on the significance of the burning rate of cigarettes. There is a comprehensive bibliography. Let us send you this impressive article for your own inspection. Write to Camel Cigarettes, Medical Relations Division, 1 Pershing Square, New York City.

*J.A.M.A., Vol. 93, No. 15, p. 1110, Oct. 12, 1929

Bruckner, Die Biochemie des Tabaks, 1936

**The Military Surgeon, Vol. 89, No.1, p. 7, July, 1941

PROCEEDINGS OF SOCIETIES

The Prairie County Medical Society met at DeValls Bluff, October 30th, electing the following officers: President, Edward Adams; Vice-President, W. H. Crockett; Secretary-Treasurer, J. C. Gilliam; Delegate, J. C. Gilliam; and Alternate, Edward Adams.

The Third Councilor District Medical Society met at Forrest City, October 30th, for the following program: Address of Welcome, R. B. McCulloch, Forrest City; Response, H. H. Rightor, Helena; "Amoebic Dysentery," C. N. Bogart, Forrest City; "The Female Urethra," G. W. Reagan, Little Rock; Address, H. Fay H. Jones, Little Rock; "How Well is the Medical Profession Meeting Growing Demands," C. E. Dungan, Augusta; and "Surgery of the Knee," F. Walter Carruthers, Little Rock. The session concluded with a dinner.

The Conway County Medical Society has elected the following officers: President, W. P. Scarlett; Vice-President, T. W. Hardison; and Secretary-Treasurer, C. E. Etheridge.

The Chicot County Medical Society meeting at Lake Village, October 8th, was addressed by M. K. Bottorff on "Snake and Insect Bites and Their Treatment."

The White County Medical Society was addressed at its October meeting by Vernon C. Newman, Little Rock, "Fractures," and F. P. Hardy, Searcy, "Hysteria."

The Lawrence County Medical Society met at Imboden, October 14th, as the guests of W. W. Hatcher and A. G. Henderson. Clinical cases were presented for discussion by H. B. Hull, Mammoth Spring. Members present were: C. C. Ball, J. C. Land, C. D. Tibbels, J. L. Merrell, J. A. Martin, W. W. Hatcher, A. G. Henderson, H. B. Hull, and T. C. Guthrie. Following the scientific session dinner was served.

J. A. Martin, Secretary.

The tenth postgraduate course was held at the University of Arkansas School of Medicine, Little Rock, October 22nd and 23rd. Speakers were: H. Fay H. Jones, Little Rock; Byron L. Robinson, Little Rock; Paul L. Day, Little Rock, "The Vitamins: Historical Summary"; B. P. Briggs, Little Rock, "The Clinical Use of Vitamin D"; Carroll F. Shukers, Little Rock, "Vitamin K: Historical Review and Chemical Nature"; Carl A. Rosenbaum, Little Rock, "Vitamin K: Use in Surgical Diseases"; Sam Phillips, Little Rock, "Vitamin K: Use in Hemorrhagic Diseases of the Newborn"; K. W. Cosgrove, Little Rock, "The Treatment of Corneal Diseases with Riboflavin"; Jerome S. Levy, Little Rock, "The Role of Nicotinic Acid in the Treatment of Pellagra"; Paul C. Eschweiler, Little Rock, "Thiamin and the B₁ Vitamins in Therapeutics"; G. W. Reagan, Little Rock, "The Early Diagnosis of Prostatic Obstruction"; M. J. Kilbury, Little Rock, "Fungus Diseases"; Fred W. Harris, Little Rock, "Cardiac Emergencies"; Randolph T. Smith, Little Rock, "Surgical Clinic"; Paul L. Mahoney and John Agar, Little Rock, "The Diagnosis and Treatment of Neuralgias of Dental Origin"; B. A. Rhinehart, "The Medical Treatment of Patients with Cancer"; J. N. Compton, Little Rock, "Present Status of Sulfonamide Therapy"; Charles Wallis, Little Rock; "Experiences with Sulfaguanadine in Diarrhea and Dysentery"; Carl L. Wilson, Fort Smith, "Sulfapyridine Anuria"; and S. C. Fulmer, "Medical Clinic."

The Lawrence County Medical Society has rescinded its resolution opposing the annual registration of physicians and has indorsed the plan.

The Fourth Councilor District Medical Society met at Pine Bluff in dinner session November 3rd for an address, "Diseases of the Heart and Kidneys," by William Kountz, Washington University, Saint Louis.

The Ouachita County Medical Society met in regular monthly session November 13th at the Ouachita Hotel in Camden. The speaker was Dr. George V. Lewis, of Little Rock, whose subject was "Infections of the Hand."

R. B. Robins, Secretary.

PERSONALS AND NEWS ITEMS

W. A. Snodgrass, Jr., recently addressed the Pine Bluff Rotary Club.

W. B. Prothro, Arkadelphia, has been called to active service in the army medical corps and assigned at Hicks Field, Fort Worth, Texas.

Neil Compton has been elected city health officer at Fayetteville.

Jos. F. Shuffield, Little Rock, has been re-elected president of the Arkansas Fox Hunters' Association.

MARRIED—On October 29th, Dr. Geo. F. Stocker and Miss Mary Alice King, both of Fort Smith.

H. H. Smith, Fort Smith, attended the Tulane Clinics at New Orleans in October.

M. E. Foster, Fort Smith, attended the Oklahoma City Clinical Society meeting during October.

G. F. Stocker, Fort Smith, has been called to duty as Lieutenant (j. g.) Naval Medical Corps, and assigned to Naval Hospital, San Diego, California.

Raymond C. Cook, R. J. Calcote, Paul L. Mahoney, Little Rock, and Virgil L. Payne, Pine Bluff, attended the recent meeting of the American Academy of Ophthalmology and Otolaryngology in Chicago.

In attendance at the Kansas City Southwest Clinical Society were: G. L. Kimball, DeQueen; J. G. Gladden, Harrison; S. M. Graves, Mt. Levi; J. J. Monfort, Batesville; and S. J. Wolfermann, Fort Smith.

Drs. Merl and Bruce Crow are erecting a hospital at Warren.

W. C. Russwurm recently addressed the Helena Rotary Club on "Experiences in Practice."

J. Donald Hayes, Little Rock, recently took special work in gastrointestinal diseases at Chicago.

J. E. Stevenson, Fort Smith, won a second leg on both The Atlanta Journal (high trap score) and the Mallinckrodt trophy (high over all score) at the trap shoot held at the Southern Medical Association.

W. F. Adams, Fort Smith, recently addressed the Child Study Club of that city on "The Child's Relation to Heredity and Environment."

J. A. Dillman, Paragould, attended the recent Tulane Clinics in New Orleans.

The Kelly, Kelly and Kelly Clinic at Sheridan burned October 26th with an estimated loss of \$9,000.

H. B. Thompson, Fort Smith, attended the recent Tulane Clinics.

W. H. Bruce, Pine Bluff, has recovered from an operation.

Max Baldridge, Bowie, Texas, has been appointed health director for Faulkner and Cleburne counties.

F. J. Scully, Hot Springs National Park, took special work for the past two months in arthritis at New York, Baltimore and Boston.

Hugh C. Brooke, Conway, has been promoted to lieutenant-colonel, medical corps, U. S. A., and assigned as camp surgeon at Camp Murray, Washington.

BORN—A son, Samuel Andrews, to Dr. and Mrs. John Redman, Mena, on November 13th.

Dr. and Mrs. O. L. Atkinson, Hempton, recently spent a three weeks vacation in California.

C. Davis Belcher, formerly of Warren and Boston, has become associated with O. L. Atkinson at Hampton.

H. O. Walker, Newport, has been elected president of the Arkansas Municipal League.

The following were registered at the Saint Louis session of the Southern Medical Association: John S. Agar, Little Rock; Mitchell Blaine, Mammoth Spring; M. E. Blanton, Jonesboro; J. P. Bremer, Point Cedar; W. R. Brooksher, Fort Smith; W. J. Butt, Fayetteville; F. Walter Caruthers, Little Rock; C. A. Churchill, Batesville; O. H. Clopton, Rector; O. T. Cohen, Jonesboro; K. W. Cosgrove, Little Rock; Paul L. Day, Little Rock; C. W. Dixon, Gould; J. K. Donaldson, Little Rock; H. C. Dorsey, Fort Smith; C. S. Early, Camden; Paul C. Eschweiler, Little Rock; M. E. Foster, Fort Smith; N. E. Fraser, Conway;

S. C. Fulmer, Little Rock; E. C. Gay, Little Rock; D. W. Goldstein, Fort Smith; Paul Gray, Batesville; W. B. Grayson, Little Rock; Fred Hames, Pine Bluff; T. S. Hare, Crawfordsville; C. P. Harris, Leachville; A. H. Hathcock, Fayetteville; C. R. Henry, Little Rock; H. A. Higgins, Little Rock; Chas. S. Holt, Fort Smith; L. K. Hundley, Little Rock; H. W. Hundling, Little Rock; Earle H. Hunt, Clarksville; R. H. Huntington, Fayetteville; H. Fay H. Jones, Little Rock; J. K. Jones, Lepanto; M. J. Kilbury, Little Rock; R. R. Kirkpatrick, Texarkana; J. S. Levy, Little Rock; V. O. Lesh, Fayetteville; R. E. Lesh, Fayetteville; J. F. Lewis, Fayetteville; L. H. McDaniel, Tyronza; H. E. Mobley, Morrilton; J. A. Moore, El Dorado; J. J. Monfort, Batesville; E. J. Munn, El Dorado; J. H. McCurry, Cash; W. V. Newman, Little Rock; A. R. Power, Hot Springs National Park; J. P. Price, Monticello; G. W. Reagan, Little Rock; Fount Richardson, Fayetteville; M. V. Russell, El Dorado; B. L. Robinson, Little Rock; W. P. Scarlett, Morrilton; Euclid M. Smith, Hot Springs National Park; H. T. Smith, McGehee; A. R. Sparks, Little Rock; J. E. Stevenson, Fort Smith; H. V. Stewart, Little Rock; E. B. Swindler, Stuttgart; L. T. Taylor, Star City; W. H. Toland, Nashville; H. King Wade, Hot Springs National Park; Chas. Wallis, Little Rock; S. J. Wolfermann, Fort Smith; W. T. Wootton, Hot Springs National Park.

Earle H. Hunt, Clarksville, took special work at the Mayo Clinic during November.

R. B. Robins, Camden, attended the recent session of the American College of Surgeons in Boston and subsequently attended the Fracture Course at Harvard University.

Capt. Wm. H. Newkirk has been transferred from Camp Grant, Illinois, to Camp Barkeley, Texas.

W. A. Snodgrass, Jr., has been relieved of duties with the army medical corps and has resumed practice at Pine Bluff.

G. R. Siegel, Clarksville, attended the Oklahoma City Clinical Society's sessions in October.

J. K. Donaldson, Little Rock, addressed the Clinical Congress of Surgeons in Boston during November on "Intestinal Obstruction."

OBITUARY

WILLIAM A. KRIESEL, age 71 years, Little Rock, died October 30th after a long illness. Born in La Porte, Indiana, he moved with his family to South Dakota during childhood. In 1897 he graduated from the Minneapolis College of Medicine and Surgery and located at Watertown, S. D. During the World War he was assigned to Camp Pike and was discharged from the army medical service as major. Following the war he located in Little Rock and for 15 years was surgeon in charge of eye, ear, nose and throat surgery in the Missouri Pacific Hospital. He was a member of Trinity Cathedral and of the various Masonic bodies. Surviving relatives are his wife, a daughter and two stepsons.

JOHN DANA ROBBINS, age 68 years, died at his home in Mount Ida October 29th after an illness of many months. Born near Caddo Gap, February 18, 1873, he received his education in the schools at Norman, Black Springs and Mount Ida, graduating from the Memphis Hospital Medical College in 1902. He first began the practice of medicine at Oden but moved to Mount Ida in 1928. In addition to his membership in the Montgomery County Medical Society and the Arkansas Medical Society, he was a member of the Methodist Church and of the Masonic and Odd Fellow lodges. Surviving relatives are his wife and two sons.

JULIUS ABRAM BOGART, age 72 years, died at his home in Forrest City November 17th following a heart attack. For several years his activities had been restricted by ill health. Born in Illinois, he graduated from the University of Arkansas School of Medicine in 1902 and had successively practiced in North Little Rock and Wheatley before moving to Forrest City in 1906. In addition to his membership in the Saint Francis County Medical Society, of which he was a past-president, he was a member of the Arkansas Medical Society and a fellow of the American Medical Association. He served two terms as a member of The State Medical Board of the Arkansas Medical Society and served as a councilman in Forrest City for many years. At the time of his death he was one of the city's police commissioners. Lodge affiliations included the Masonic bodies, the Knights Templar, Scottish

Rite and Shrine. Surviving relatives are his wife and two sons, one of whom, C. N. Bogart, is in practice at Forrest City.

THOMAS DOUGLASS, age 73, dean of practicing physicians in Franklin county, president of the Tenth Councilor District Medical Society and secretary of the Franklin County Medical Society for the past 45 years, died at a Fort Smith hospital November 7th. Born in Little Rock, he moved to Ozark at the age of five and had resided continuously there for 68 years. He graduated from the Missouri Medical College in 1889. He was a charter member of the Methodist church, of the Masonic lodge, and of the Rotary club, of which he was a past-president. For many years he had served as chairman for the Red Cross in Franklin county. At the time of his death he was a member of the committee on Necrology of the Arkansas Medical Society. Surviving relatives are his son, Dr. Thos. Douglass, of Chicago, a daughter and three brothers.



RANDOM THOUGHTS OF THE SECRETARY

October 20th. The law says the osteopath shall not make use of, nor prescribe drugs or medicines in treatment; the druggist exhibited the prescriptions; the osteopath admitted he wrote the prescriptions and used the drugs; the judge charged the jury if it was shown that the osteopath used drugs, he was guilty of violating the law. So, the jury said he was not guilty. Such is life with juries under the democratic form of government.

October 30th. This rainy day by rail to Little Rock where we lunch with Fred Harris and Alan Cazort with little discussion of allergy. Thence to the Collector of Internal Revenue who has evidenced some interest in the Society's income with the possibility of collection of an income tax. This is the subject of discussion and further discussion, so away to Grayson's office where we sit in on a conference on premature infant mortality, contributing naught to the discussion, but offering cooperation in our heartiest manner. Continuing in conference, the matter of emergency medical service for civilians is next on the agenda and is likewise set for further discussion. Rain still with us, by rail to Forrest City, to find the Third Councilor District Medical Society, scheduled for dinner session at 6:30, busily engaged with dessert at 6:40, and our arrival is apparently the signal for adjournment as but a few hardy souls remain as we finish our dinner. Again hitch-hiking, this time with Dr. and Mrs. Jelks, to Memphis, and entertained in good manner by this grand gentleman and physician. Tarrying in Memphis, the rain not abating, but to bed on the Memphis-Californian at 10:00 p. m., resting in peace and comfort until Mansfield at seven in the morning and away to the chores of the day.

November 7th. Comes via Chamberlain the tale of the patiently so earnestly sold by Bill Arnold's allergic survey

which showed her sensitive to eggs that she returned the hen the grocer sent asking for a rooster instead.

November 10th. Had we not seen Everett Foster board the train for Saint Louis tonight we would not have believed that Foster and Wolfermann would attend the same meeting. Yet, in the words of Foster, "I cannot attend a meeting except it be one where Sid is already there."

November 11th. Twenty-three years ago we first commemorated that the "war to end wars" was ended, giving thanks that the horrors of war would never again be seen. Yet today no nation and no people are safe from those outlaw nations which have neither regard for promises and pledges nor for the opinions of mankind.

November 12th. Arriving in Saint Louis and hurrying to our section in the Southern, we have opportunity to greet H. T. Smith, Vernon Newman, Paul Gray and a few others from the state in the exhibit hall. The Coca-Cola booth opens late, just in time for the devotees of another soft drink to have their ten o'clock potion, and here we find J. J. Monfort and the husband of the Auxiliary president. The youngster, guest of the meeting, spends the morning among the exhibits, intensely attracted by Lilly's exhibit on the standardization of insulin, his interest apparently derived from the youthful cruel streak to see the mice in convulsions. Tonight we celebrate "Councilors' Wednesday night" with the Wolfermanns and J. Cash King at the Jefferson's swanky night spot where we add to our motley collection of experiences that of being mistaken for an orchestra leader, an unjustified error, but encouraged by us in the interests of hilarity on this occasion.

November 13th. The section is put in the history book and gladly we give over to new officers for Richmond in 1942. Time for some casual visiting in Saint Louis until we board the Ann Rutledge at four-thirty for Chicago, more than a capacity crowd in the cars, and with annoying speed we travel roughly to Chicago, offering no alternative to a comfortable bed in the Palmer House at ten.

November 14th. On hand for the secretaries conference where we renew acquaintance with state secretaries and editors from over the country, missing Cohenour and Bartelsmyer. Pleased to see Indiana's Shanklin in rare form and exuberant, showing the best of health. There is much discussion of deferment of medical students, of selective service and of social security throughout the day, some thoughts being comforting, others rather disturbing. To the editor's dinner tonight, a function which increases its attendance yearly, but to mutual benefit.

November 15th. Today General Hershey, self-styled ruralist from Indiana, indeed a likeable chap, talks on rehabilitation and the conversion of "10-tooth rejectees into 12-tooth soldiers." The conference adjourned, all hail cabs for the station and Evanston where college spirit and football are rife. During the afternoon the "Fighting Irish" acquire some sort of championship by being off-side eight times, three of these in succession, a feat unparalleled in Arkansas high school football. But Brothers Ziemba and Juswick valiantly play and make the most of the opportunities which the "Wildcats" present, winning 7-6. Corrovent is found to play a game as great as expected, twisting and running the entire afternoon, mostly in the direction of Notre Dame's goal. To a get-together in Evanston where we hear the little princess

story with its unexpected ending of maternal unbelief. Aboard the Californian at nine for Kansas City and abed before the lights of Chicago are behind.

November 16th. Passing through Kansas City with but short pause and no time to visit Jessie Lockwood who is recovering from pneumonia. On home in rare comfort aboard the Southern Belle.

November 17th. This day concerned mostly with a desk load of mail, all of which appears to require immediate answer.

November 20th. After three years and three terms, this is announced as the last attempt to have an earlier Thanksgiving.

WOMAN'S AUXILIARY PAGE

MRS. RALPH CROSS, Publicity Secretary, Texarkana

The Auxiliary to the Garland County Medical Society recently entertained at a luncheon in honor of Mrs. C. A. Churchill, State President. Mrs. Churchill discussed "Our Heritage in American Medicine in Accordance with the American Way of Life."

The Tri-County Medical Society Auxiliary met October 3rd in the home of Mrs. T. G. Martindale, Hope, electing the following officers: President, Mrs. J. W. Kennedy, Prescott, and Secretary-treasurer, Mrs. L. J. Harrell, Prescott. Mrs. Jim McKenzie, Hope, reported on the recent board meeting in Little Rock.

Mrs. J. C. Beard read a most interesting paper on "Nutrition" at the October meeting of the Auxiliary to the Jefferson County Medical Society which met at the home of Mrs. Fred Hames in Pine Bluff.

Mrs. H. A. Causey, Secretary.

A nutrition forum, considered a valuable part of the present national defense program, was presented October 24, by the Bowie and Miller Medical Auxiliary, for its annual open meeting.

Speakers were two prominent physicians, Dr. W. Myers Smith, of the Arkansas state health board and Dr. J. M. Coleman, of the Texas state board of health. Dr. Coleman had for his subject "Nutrition from Birth to Adolescence" and Dr. Smith spoke on "Nutrition from Adolescence to Adulthood."

According to statistics, a lack of proper nutrition in all walks of life is the cause of preventable illness and public education is needed in proper food values.

Miss Bernice Reynolds and Miss Hazel Craig, home demonstration agents for Bowie and Miller counties, respectively, presented a practical demonstration related to the subject.

The program was greatly aided by the efforts of Dr. W. B. Bessonnette and Dr. B. M. Lawson of the Bowie county health units.

Committee on arrangements for the forum was Mrs. J. T. Robison, general chairman, assisted by Mrs. C. H. Frank, Mrs. R. W. Pickett, Mrs. Harry E. Murry, Mrs. Perry Priest, Mrs. L. J. Kosminsky, Dr. Frances Spinka, Mrs. E. L. Beck and Mrs. T. E. Fuller.

Through an unfortunate error, the name of Mrs. T. G. Porter, Hazen, was not given in the Membership Roster of the Arkansas Medical Society as published in the November Journal. Mrs. Porter has been a member of the Auxiliary since its organization. The Journal regrets this error.

Discussing services women can perform in connection with the program of the Women's Volunteer Defense Bureau, Miss Eva Atwood, superintendent of nurses at Wild-

cat Hospital, addressed the Auxiliary to the Sebastian County Medical Society November 10th at a luncheon meeting.

At the business session, at which Mrs. W. R. Brooksher, Jr., president in the absence of Mrs. C. T. Chamberlain, president, the Auxiliary voted to hold a luncheon meeting December 3rd, in honor of the state president, Mrs. Calvin A. Churchill, Batesville, Arkansas, who will make her official visit at that time. The Auxiliary usually dispenses with the December meeting but will hold one this year because of the state president's visit, Mrs. W. F. Rose, publicity chairman, explained.

Hostesses for the luncheon were Mrs. Walter Eberle and Mrs. W. F. Adams. Guests were Mrs. W. J. Nelson, Mrs. Kenneth Thompson and Miss Atwood. Others present were Mrs. R. E. Schirmer, Mrs. Eugene Stevenson, Mrs. S. P. Stubbs, Mrs. Fred Krock, Mrs. J. S. Southard, Mrs. Brooksher, Mrs. Wilson, Mrs. C. L. Kellum, Mrs. Mabel Wood Scott, Mrs. B. B. Bruce, Alma, Ark., Mrs. I. Fulton Jones, Mrs. B. L. Ware, Greenwood, Ark., and Mrs. Rose.

Mrs. W. F. Rose,

Publicity Chairman of the Auxiliary of the Sebastian County Medical Society.

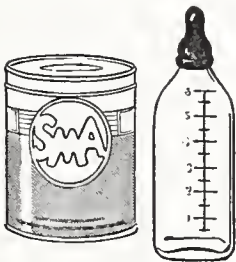
The Independence County Medical Society and Auxiliary met in dinner session November 10th in Batesville. The business sessions of the two groups followed dinner. A Thanksgiving and harvest motif prevailed in the decorations and table appointments. The table was centered with a colorful arrangement of fruits and vegetables. Vivid autumn leaves were strewn the length of the table and tiny turkeys among the leaves suggested the approaching Thanksgiving holiday. Chrysanthemums were used in the further decoration of the rooms. A delicious turkey dinner was served.

After the routine business of the Auxiliary was disposed, Mrs. Ralph Weddington, president, set aside the planned program in order that the group might consider a letter from the state president of the Auxiliary, Mrs. Calvin A. Churchill. The letter set forth the objectives of the year's work. They were presented and considered in a round table discussion with Mrs. Weddington leading the forum. Eleven women were present for the discussion.

The Tri-County Medical Society met in dinner session at Prescott October 30th with Drs. A. S. Buchanan and J. W. Kennedy conducting an "Information Please" quiz on current and medical topics. Mrs. Jim McKenzie, Hope, won first prize for the women while Dr. Don Smith, Hope, won first prize for the men.

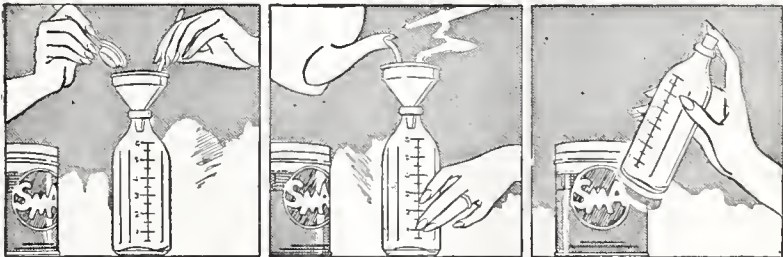
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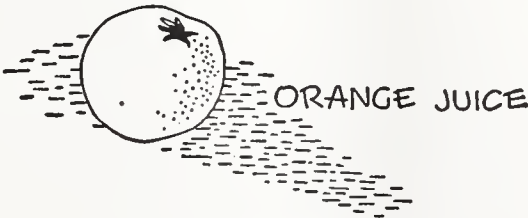


1. Empty one tightly packed measuring cup of S-M-A Powder into bottle.
2. Add enough warm, previously boiled water to make one ounce.
3. Cap bottle and shake into solution. Feed at body temperature.

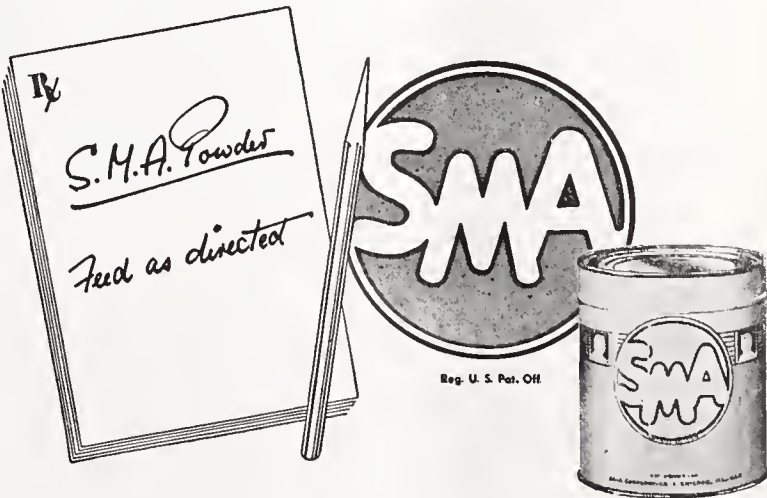
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BOOK REVIEWS

Shock Treatment in Psychiatry: A Manual, by Lucie Jessner, M. D., Ph. D., Resident Psychiatrist, Baldpate, Georgetown, Mass.; Graduate Assistant in Psychiatry, Massachusetts General Hospital; Assistant in Psychiatry, Beth Israel Hospital, Boston; and V. Gerard Ryan, M. D., Associate Psychiatrist, Elmcrest Manor, Portland, Conn.; Assistant in Psychiatry, Harvard Medical School. Introduction by Harry C. Solomon, M. D., Clinical Professor of Psychiatry, Harvard Medical School; Chief of Therapeutic Research, Boston Psychopathic Hospital. 149 pages. New York: Grune & Stratton, Incorporated, 1941.

This monograph is a very excellent treatise on shock therapy in psychiatric treatment. Each type of treatment is fully discussed from all phases and the technique is so thoroughly outlined that it will prove a valuable aid in the hands of those who are engaged in using this form of therapy in institutions for the mentally ill.

Occupational Diseases: By Rutherford T. Johnstone, A. B., M. D., Director of the Department of Occupational Diseases, Golden State Hospital, Los Angeles, California; Formerly Assistant Professor of Medicine, University of Pittsburgh School of Medicine. 558 pages with 132 illustrations. Philadelphia and London: W. B. Saunders Company, 1941. Price \$7.50.

This is a most practical work on a subject of increasing importance. Workmen's compensation insurance, its administration and its relation to the physician, are presented in part I. Industrial poisoning, its diagnosis, treatment and medicolegal aspects, are covered in part II. Other sections deal authoritatively with metal poisoning, silicosis, sprains of the back and hernia, dermatoses and occupational malignancy.

AMERICAN MEDICAL ASSOCIATION BROADCASTS

Doctors at Work, the dramatized radio program broadcast by the American Medical Association and the National Broadcasting Company will go on the air for its second season beginning December 6, 1941, from 4:30 to 5:00 P. M., Central Standard time. The program will be broadcast on upwards of seventy-five stations affiliated with the Red Network of the National Broadcasting Company and will be heard from coast to coast.

Doctors at Work a successful, serialized story broadcast last year dealt with the experiences of a fictitious but typical American boy choosing medicine for his vocation and proceeding to acquire the necessary education

and hospital training for the private practice of medicine. Interwoven with the personal story of young Doctor Tom Riggs and his fiancée, Alice Adams, was the romance of modern medicine and how it benefits the doctor's patients.

The new series of broadcasts will resume where last year's story left off, namely, with the marriage of Tom Riggs and Alice Adams, and the subsequent life of a young doctor and his wife in time of National Emergency in a typical, medium-sized, American City.

The program will be produced under the supervision of the Bureau of Health Education, of the American Medical Association, W. W. Bauer, M. D., Director. Scripts will be by William J. Murphy of the National Broadcasting Company, author of such successful radio productions as "Flying Time," "Cameos of New Orleans," "Your Health," "Medicine in the News" and last year's "Doctors at Work." The scripts will again be produced by J. Clinton Stanley and the National Broadcasting Company orchestra will be under the direction of Joseph Gallichio as heretofore. Actors will be drawn from the well-known group of Chicago radio actors previously heard in American Medical Association and other successful broadcasts.

The program will be available to all stations affiliated with the Red Network of the National Broadcasting Company. Announcements should be sought in local newspaper radio columns under the title "Doctors at Work" or possibly "American Medical Association" or in some instances, "Health Broadcasts." Evidence of local interest in the program may be the determining factor in whether a local station takes this educational, sustaining feature or sells its time to a local, revenue producing program.

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THE NATURE OF THYROID DISORDERS *

J. HARRY HAYES, M. D.
Little Rock

Disorders of the thyroid gland are so protean in nature that the entire field of medicine, with all its specialties, is called upon for their management and treatment.

The exact etiology of most of these disorders is not definitely established. We do know and believe, however, that the offspring inherits a weakness or predisposition for disorders of the thyroid as well as for all other glands of internal secretion.

Under disorders shall be listed:

- (1) Congenital goiter.
- (2) Simple goiter of children.
- (3) Thyroid inflammations (acute and chronic).
- (4) Thyroid insufficiencies.
- (5) Diffuse and nodular goiters.
- (6) Malignancies.

A goiter is any abnormal enlargement of the thyroid gland.

Congenital Goiter

Congenital goiter is comparatively rare. Reviewing 640 cases of goiter, Demme found 37 congenital goiters. Diethelin saw 25 congenital goiters out of 2,292 goitrous patients. Out of 1,996 goiters, Richard found 43 cases of congenital goiter.¹

When present, what is the nature of congenital goiter? Histologically, it does not differ much from the adult types. It seldom exceeds the size of a hen's egg and is most often entirely cervical. In some instances, however, it has been found intrathoracic. Congenital goiter is often of the circular type; in that case it is most dangerous as it may cause fatal spells of suffocation.²

Most congenital goiters produce no symptoms. Many remain latent and subside rapidly with or without treatment. Others attain a much larger size and in a vast majority of cases can be handled very satisfactorily with medical treatment. In the fulminating forms, accidents can develop rapidly. Cyanosis is intense; dyspnea is quite marked; stridor is present; the voice is hoarse; the wailing is weak; the eyes are protruding and death soon follows. The primary cause of the death is the goiter.

Simple Goiter in Children

Goiter in children is not at all rare. In fact in endemic areas it is very common. Contrary to common belief, we do have endemic areas in Arkansas. In most instances the goiters of children are diffuse in nature and cause no symptoms. Most congenital goiters have a goitrous parentage, but this is not so with children who develop goiter. The parents are quite often goiter free.

If a goiter develops in early childhood, it ordinarily does not regress; it may fluctuate, but it does not disappear. It is not at all uncommon to examine a third grade room of children in an endemic area and find one-fourth to one-third of the room afflicted with goiter. The same children, one year afterward, may be apparently goiter free; yet the following year the goiters may seem to have returned. This is frequently true whether or not treatment has been instituted.

The statement is often made that goiter in children if left alone will disappear spontaneously. This statement is incorrect, but could be applied with a fair degree of accuracy for goiters of adolescence. When these children reach the juvenile stage after the physiological phenomena of adolescence such as puberty, etc., have passed, the goiter usually will disappear.

Simple goiter in children is often accompanied by a health and development of below par.

* Read before the Sixty-sixth Annual Session, Arkansas Medical Society, Little Rock, April 14, 1941.

Thyroid Inflammations

Thyroid inflammations are fairly common and are classified as acute and chronic. We usually call thyroiditis an inflammation of the normal thyroid gland; and strumitis, an inflammation of a goiter. The acute cases may or may not go to suppuration. Whether a gland goes all the way to suppuration depends on the number and virulence of the organisms and the resistance of the host. Also, the great blood supply of the thyroid as well as the iodine content probably plays a major role. Degeneration and hemorrhage come nearer encouraging suppuration than in the normal gland; therefore, Crotti takes the stand that many cases of acute suppurative thyroiditis are in reality acute suppurative strumitis.

Acute inflammations may occur at any age, but most frequently occur between the ages of 50 and 60 due to degenerative changes. Women are more often affected than men due to the many changes in the thyroid occurring at menstruation, pregnancy, the menopause and the like.

It is the nature of thyroiditis and strumitis following influenza, cholera, inflammatory rheumatism, pneumonia and erysipelas to have about the same symptomatology. In tonsillitis and malaria they seem to have a milder course.

In pneumococcic thyroiditis there is little tendency to suppuration; as also is true in typhoid and puerperal thyroiditis. Thyroiditis from scarlet fever, measles and parotitis never suppurates.

Crotti considers all acute thyroiditis, strictly speaking, to be secondary, that is, metastatic in origin; and he regards all thyroiditis that does not suppurate to be a toxic thyroiditis due to circulating bacterial toxins. As a rule, no organisms can be cultured from the pus in suppurative cases; however, on some occasions the typhoid and pneumococcus have been cultured.³ When suppuration does occur and progresses, if it is not relieved by drainage, the pus will certainly burrow out, and is apt to pick the esophagus and even the trachea as well as the skin as an outlet.

Shooting pains never fail to be present in the back of the ear, occipital region and shoulder. These referred pains are an early symptom and are complained of before there is any swelling in the thyroid. These shooting pains are due to an inflammatory irritation to the superficial and deep cervical plexuses.⁴

Chronic thyroiditis cases consisting of Hashimoto's disease or struma lymphomatosa, etc., and

Reidel's struma, or chronic non-specific thyroiditis, etc., are rare and it is generally agreed by all that they are distinct and separate diseases. They both occur in pre-existing goiters.

Struma lymphomatosa is slow in onset, tender and firm. The entire gland is affected but it scarcely invades the capsule and never extends beyond it. It is freely movable and is very commonly the forerunner of myxedema.

Reidel's struma involves the capsule and in severe cases involves the muscles of the neck, the carotid sheath and may even extend into the mediastinum, destroying the entire gland. However, Reidel's struma may be limited to a single lobe.

In struma lymphomatosa, due to the entire gland being affected, it is difficult for the surgeon to do anything less than a complete thyroidectomy. In Reidel's struma the entire gland should be removed as early as possible to keep the process from extending to adjacent structures.

The nature of both diseases is progressive destruction.

Thyroid Insufficiencies

It is believed by most authorities, but not by all, that the diseases of hypothyroidism have a common origin: either absence or insufficiency of the gland or inefficiency of the gland. Thus, surgical, spontaneous adult, spontaneous infantile, hypothyroidism and cretinism are only different degrees of the same disease.

What is of importance is the thyroid's loss of function and especially the period of development at which the thyroid ceased to function or became insufficient. They are essentially chronic diseases. Once established, they continue unless corrected by appropriate treatment. The whole organism is retarded in its functions.

Pathology most common to the various forms of thyroid insufficiency includes: (a) The **skin** is infiltrated with a mucin-like substance. It is dry and scaly due to a lack of perspiration and oil. It feels rough to the touch. The hair is sparse and brittle. The mucous membranes are edematous. The edema may involve the eustachian tube causing deafness and the vocal cords causing hoarseness. The electrical conductivity is diminished. Dryness of the skin is regarded as the cause.

(b) The **osseous system** is markedly retarded. It is stated that a discrepancy of six to eight

months between the normal ossification and the suspected one means thyroid deficiency. If the ossification centers are up to date, thyroid deficiency can be ruled out.

In comparing roentgenograms, one should consider: (1) The age of the ossification centers. (2) The density of the ossification centers. (3) The epiphyseal lines united or not united to the metaphysis.⁵ In the child, roentgenograms are much more reliable than cholesterol or metabolism determinations.

(c) The **nervous system** is diminished, as demonstrated by reactions to adrenaline and pilocarpine. The outstanding manifestation in thyroid deficiencies is mental defectiveness. These manifestations may range from sluggishness to idiocy.

(d) The **cardio-vascular system** is affected. In well-defined cases the heart is always more or less enlarged. The enlargement is due to a symmetrical dilatation, possibly with myxedematous infiltration, and not to hypertrophy of the cardiac muscle fibers themselves. The heart resumes its normal size after appropriate treatment.

(e) General and basal metabolism is reduced.

Body Weight and Myxedema

The recent work of William A. Plummer has shown that the diagnosis of spontaneous myxedema would be facilitated if members of the medical profession would disabuse themselves of the idea that the disease is always associated with overweight. In 38.5 per cent of 200 cases, the patient's weight was less than, or not greater than, the theoretically normal weight. His work indicates that when the disease is well established, the amount of edema, on the average, does not increase with the severity of the disease. The weight of the patient actually decreases, and after appropriate treatment, when the metabolism is corrected, the patient tends to gain weight by the acquisition of normal body tissue.⁶

Diffuse and Nodular Goiters

The nature of all goiter is to undergo changes continuously. Whatever may be the type, the ultimate result is a cardio toxic state.⁷ As stated before, goiter developing in the young ordinarily does not regress. It may fluctuate but does not disappear. After the formation of a goiter, sooner or later hyperplasia begins. The most likely exception to this is the goiter of adolescence (the non-toxic diffuse type). This

type of goiter is equally enlarged in all its parts. The individual acini are distended but there are no newly formed acini and no new cell formations. This is the goiter that is capable at times of recovery. Once hyperplasia has begun, there is an increased activity of the gland called hypersecretion by Moebius, thyrotoxicosis by Kocher and hyperthyroidism by the Mayos. Once this has happened, the disease is always present even though it cannot be detected clinically or by laboratory tests.

Hyperthyroidism is a condition characterized by a symptom complex in which cardio-vascular symptoms, thyroid enlargement, nervousness, and other symptoms are present. They are not always all present at the same time; nor are all of them developed to the same degree of intensity. In fact, some of the common symptoms may never appear. Remissions are often frequent, due to natural causes, different types of therapy or iodine.

Hyperthyroidism is a chronic disease. No matter if a given case apparently changes its symptoms dozens of times during its course, it still is chronic. This holds good for hyperthyroidism caused by any type of goiter except the occasional goiter that is so fulminating that death occurs in a short time without a remission.⁸ Hyperthyroidism ushers itself in and, after a time, which may be long or short, a normal condition returns. The first return is usually and slightly to the hypo side where it will stay for a period of uncertain duration. Then hyperthyroidism appears again, usually worse than the first time, and subsequently the condition approaches normalcy without, however, actually reaching that state. These processes repeat themselves until irreparable visceral damages occur.⁹ Finally we may have, in the same patient, hyperthyroidism and hypothyroidism both at the same time. This seems unacceptable at first because we think only of the fully developed cases of hypothyroidism or hyperthyroidism.

In thyrotoxicosis, there comes a time when the gland is burned out. The epithelial elements have been gradually replaced by connective tissue and this leads to hypo function and hypothyroidism. Tachycardia, tremor, loss of flesh, etc., subside gradually. Two processes are going on at the same time.¹⁰

I have encountered a few cases in which I am convinced the patient was suffering from both hypothyroidism (with skin changes) and hyperthyroidism at the same time. Thyroid extract re-

duced one patient in weight 30 pounds with a general improvement, and thyroidectomy placed her in the best health she had experienced in 20 years. The thyroid in one lobe had undergone cystic degeneration. Her rheumatic pains in the right shoulder cleared up within two months following operation. She continues to take three grains of thyroid extract daily.

Hertzler states that in some curious cases in which a hyperplastic toxic goiter is in a stage of transition from a hyper to a hypo state, we have symptoms of both diseases—both hyperthyroidism and myxedema. He states he is convinced that the association of the two processes is much more common than is generally supposed.¹¹

Pregnancy influences hyperthyroidism. Pregnancy rarely occurs in severe hyperthyroidism, but this is not true in cases of mild hyperthyroidism. Statistics indicate that some cases are improved during pregnancy, but at least 60 per cent of the thyro-toxic patients are made worse by pregnancy.¹²

Hyperthyroidism differs in the young and in the aged. Generally speaking, the young are good operative risks and the aged constitute one of our most hazardous surgical problems. The young are highly stimulated. In the reports on Helmholtz's 40 cases and the Cleveland Clinic's 53 cases the symptoms are almost identical, namely, tachycardia, nervousness, thyroid enlargement, exophthalmos, bruit, hyperhidrosis, tremor, loss of weight, polyphagia, general weakness, etc.¹³

In hyperthyroidism in the aged, the patients are not usually stimulated strongly. They are generally afflicted with adenomatous goiter, lose weight, and have cardiac symptoms associated with weakness. The B. M. R. is not always high. Both the systolic and diastolic blood pressures are frequently markedly elevated. Hyperthyroidism is not an infrequent finding in a large group of elderly patients with cardiac symptoms.¹⁴

The most peculiar or most characteristic features of Grave's disease, next to its specific tachycardia, is the morning exacerbation of its symptoms. In the great majority of cases, no matter if they are true cases of Grave's disease or simple goiter complicated with some thyro-toxic symptoms, this symptom is nearly always present. When they rise, they feel more tired than when they went to bed.¹⁵

Malignancies of Thyroid

Primary cancer in the normal thyroid is exceedingly rare if it happens at all. Nearly all malignancies of the thyroid occur in nodular goiter; therefore, nodular goiter is to be considered a precancerous lesion. Cancer of thyroid occupies the most prominent place of any malignancy so far as metastases to bones is concerned. Is there anything that will lead one to suspect malignancy? A nodular goiter that has been going on in a quiescent manner, then suddenly begins to grow fast and changes its consistency to that of a harder gland, provides evidence of malignancy, and action should be taken accordingly.¹⁶

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HYPERTENSION *

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Arterial hypertension is one of the most important conditions with which doctors have to deal, because: I, It occurs in one of every seven people, and over the age of fifty in one of every three¹; II, It causes twice as many deaths as cancer²; III, It is a frequent cause of rejection by industry³; and IV, It results in much suffering and in tremendous losses of time and money.

High pressure may be primary or secondary. In over forty clinical⁴ syndromes it is considered secondary to other disease processes. These fall into four main groups, neurological, endocrine, cardio-vascular, and renal. Each of these have been reproduced experimentally:

1. Neurological hypertension was produced by the intra-cisternal injection of kaolin in rats.⁵

2. Endocrine hypertension results from the removal of the pituitary or the adrenal cortex.⁶

3. Cardio-vascular hypertension may be produced by section of the inhibitory sino-aortic nerves.⁷

4. Renal hypertension, and incidentally eclampsia,⁸ in pregnant dogs, results from the Goldblatt constriction of the renal artery⁹ with a clamp, or from the Page¹⁰ compression of the kidney in the scar of cellophane perinephritis.

But in the vast majority of hypertensives, the high pressure has not been considered secondary to other pathology. These cases are classified as primary or essential hypertension. Many factors have been suggested as its cause, and we will briefly discuss five of them.

1. **Heredity.** A family history of apoplexy, heart disease, nephritis, arterio-sclerosis, or diabetes is certainly obtained from hypertensives far more frequently than it is from non-hypertensive patients. Broad-chested¹¹ persons have from four to eleven times the hypertensive expectancy of the narrow-built people. And every doctor has his "Vascular Families" with their frequent epistaxis in childhood, labile cold-pressor reactions, general vaso-motor instability, and vulnerable temperament. But hypertension also occurs without any of this hereditary background.

2. **Toxins,** including among many others lead, alcohol, tobacco, syphilis, and focal infection, have been blamed. In the majority of cases, there is no evidence that toxins play an important part.

3. **Arterio-sclerosis.** We all know that it can result from high pressure, but it cannot be considered the basic cause, as sclerosis of the large and medium-sized vessels occurs without hypertension.

4. **Endocrine Abnormalities.**⁶ Hypertension is frequently associated with obesity, the menopause, hyperthyroidism, diabetes, adrenal adenomas, and pituitary basophilism. But it is not produced by removal of the adrenal medulla, the gonads, the pancreas, the thyroid, or the parathyroids. Too, most hypertensives show no signs of endocrine dysfunction.

5. **Nervous Influences.** In animals, these are quite unnecessary, as hypertension can be produced after complete excision of the spinal cord and sympathetic chains.¹² But that the nervous factor can be a very important one in human hypertension is proved by the occasional cure by sympathectomy. However, "high pressure living" is unjustly stressed. In an analysis of 30,000 life insurance applicants, Weiss¹³ found farmers to have as much hypertension as lawyers, doctors, teachers, and business men. It is evident that farmers live in a much calmer environment.

The relegation of these five groups to the role of predisposing factors is probably in harmony with the facts. Simulating essential hypertension far more closely than any of the above, in both clinical features and microscopic pathology, is experimental renal hypertension. Before listing the evidence for this statement, let us consider the usual clinical picture.

Essential hypertension is a wide spread arteriolar sclerosis affecting the entire body, but manifesting itself especially in disturbed function of the kidneys, the heart, the brain, and the eyes. It is subdivided on the basis of severity and progressiveness into benign and malignant types. Most cases are benign with symptoms often indefinite for years. The onset is commonly between the ages of 45 and 60, a decade later than the onset of the high pressure secondary to chronic nephritis. Symptoms include headache, fatigue, irritability, vertigo, insomnia, dyspnea, palpitation, and often nocturia and constipation. The systolic pressure will be above 160, frequent-

* Read before the Sixty-sixth Annual Session, Arkansas Medical Society, Little Rock, April 14, 1941.

ly around 220. The diastolic pressure will usually be over 100 and often 120 or higher. We have a patient who ran a diastolic pressure of 210 for a time. The uncomplicated case will have accentuated heart sounds and some hypertrophy of the left ventricle, but the heart rate and rhythm will be normal, and there will be no murmurs or signs of congestive failure. The retinal arterioles show only moderate sclerosis. Quite commonly, the patient is overweight.

Laboratory studies will reveal a normal blood-urea, the urea-clearance 75% of normal or better, the concentration-dilution test normal, and the urinalysis normal or with a trace of albumin and an occasional red blood cell. The Wasserman will be negative, and often there is slight anemia. On fluoroscopy, the heart is enlarged to the left, and there may be a slight widening of the aorta. The electrocardiogram shows only left axis deviation and slight "S-wave" changes. Eventually this benign picture will change to one of serious insufficiency of the heart and kidneys, and the terminal event will be cerebral hemorrhage, congestive heart failure, or coronary occlusion.

A small percentage of primary hypertensives present a much more serious picture from the start. To this group, the term malignant hypertension is applied. They have all the abnormalities of the benign type accentuated, a younger age, a higher pressure, and a much faster course. The retina shows hemorrhagic exudates and edema of the optic disks. Kidney insufficiency and nitrogen retention develop rapidly. Response to treatment is very poor, and they usually die of uremia within eighteen months.

What is the actual mechanism of the production of the high pressure? It is not change in the heart size, the heart output, the blood volume, or the blood viscosity. All of these¹⁴ have been proved to be secondary factors. For example, the large left ventricle is a result of the high diastolic pressure. Retinal examinations and autopsy findings show that the high pressure results directly from the decreased caliber of the arterioles increasing the peripheral resistance. So the basic cause of hypertension must be the factor that narrows the arterioles by spasm or sclerosis. Physicians frequently see a sudden marked lowering of a high pressure result in bankruptcy rather than benefit. This led to the conception of hypertension as a compensatory mechanism, to assure adequate blood supply through sclerosed vessels, damaged organs, or a leaking aortic valve. High pressure is needed to force blood

through the constricted arterioles, but if this peripheral resistance can be reduced to normal, the pressure will naturally fall. When the heart fails, the diastolic pressure cannot drop very far, so the fall is mainly in the systolic and pulse pressures. An adequate circulation will be maintained only as long as the pulse pressure is equal to one-half the diastolic pressure.

Now let us consider how experimental renal hypertension simulates essential hypertension, and some of the evidence that points to the products of renal ischemia as the basic cause of the arteriolar sclerosis:

1. Kidney clearance tests show that in essential hypertension the renal blood flow is decreased while the glomerular filtration is not changed. This indicates constriction of the renal efferent arterioles.¹⁵

2. Moritz and Oldt¹⁶ examined the kidneys from 100 hypertensives, who during life showed no evidence of renal disease. All of them showed endothelial hyperplasia, medial fibrosis, and intimal hyaline degeneration, the typical findings of experimental renal hypertension. In the kidneys from 100 non-hypertensive patients there were none of these signs of arteriolar damage, but this distinction did not apply to the large or medium-sized vessels. Either the high pressure must be due to the vessel damage and resulting ischemia, or it causes secondary vascular damage in the kidneys without affecting other blood vessels which seems improbable.

3. Goldblatt⁹ produced persistent hypertension in the dog by clamping both renal arteries or by clamping one artery after the opposite kidney had been removed. Moderate constriction produced a benign syndrome with the kidney excretory function and all known urinary constituents normal. Severe constriction produced the malignant picture with definite kidney insufficiency. This hypertension could be abolished by removing the ischemic kidney.

4. Houssay¹⁷ produced hypertension by grafting ischemic kidneys onto the carotid arteries of nephrectomized dogs. This indicates that a pressor rather than a nervous mechanism is involved. It has been definitely established that bilateral nephrectomy in itself does not elevate the blood pressure of the experimental animal.¹⁴

5. Page and his associates have isolated the pressor substance in crystalline form, and named it angiotonin.¹⁸ It is formed by the enzyme-

like activator of normal blood combining with the renin which is produced by the ischemic kidney.

6. Hypertension can be experimentally produced by the administration of such sterols as testosterone, cortate, and several of the estrogens.¹⁹ This high pressure can then be abolished by giving renal extract. And the fact that abnormal sterols are formed in various secondary hypertensive syndromes, such as Cushing's disease, suggests that all causes of hypertension may act by causing renal damage.

Hypertension associated with one-sided kidney disease, such as pyelonephritis or hydro-nephrosis, is often cured by nephrectomy.^{20, 21, 22} Any chronic urinary obstruction will throttle the kidney circulation by fibrous tissue replacement of the damaged renal parenchyma. Hence, the need for cystoscopic examination, and also the great importance of thorough treatment of pyelitis.

Next, we will list the evidence of the formation in normal kidneys of an anti-pressor which acts as an inhibitor of the pressor substance, angiotonin:

1. Goldblatt⁹ could not produce hypertension by clamping one renal artery when the other kidney was left to function normally.

2. Houssay¹⁷ could produce high pressure in his neck-graft experiments only in nephrectomized animals. In these nephrectomized dogs, the angiotonin action was greatly inhibited by extracts of kidneys, muscle, or lung, and even by large transfusions of normal blood.

3. During the last part of pregnancy, hypertensive animals commonly show a marked drop in pressure, which returns to its previous level following delivery.²³ One must assume that the fetus or placenta forms a substance capable of reducing the mother's pressure, similar to the action of fetal insulin on the diabetic mother.

4. Successful reduction of hypertension in both animals and humans, by treatment with hog kidney extracts has been reported by two independent groups of workers. Grollman, Harrison, and Williams²⁴ administer their extract orally, while Page and his group²⁵ use the parenteral route. Six patients were given injections of extract from two pounds of whole fresh hog kidney, daily. After one week, the average pressure of the group was reduced from 223/130 to 168/102. All had less headache, dyspnea, and

malaise. Three terminal stage cases of malignant hypertension had improvement of vision, disappearance of convulsions and stupor, and marked general improvement.

Treatment—until these kidney extracts are commercially available, our treatment of hypertension must follow the time-beaten path.

1. Operative treatment is the best for severe cases, especially for those under the age of 30 years, according to Peet, Woods and Braden²² who reported 350 cases. They claim marked decrease in pressure in 51%, and much improvement of the major symptoms in 86%. They state that the rationale of the operation is based on the relief of renal ischemia by interruption of the sympathetic vasoconstrictor outflow to the kidneys.

2. Many drugs are used, including sedatives, diuretics, cathartics, iodides and vasodilators. All fail at times. Potassium thiocyanate²⁶ produces an average drop of 40 systolic and 20 diastolic in three-fourths of the essential hypertensives. But it can produce toxic symptoms and often fails in malignant hypertension.

3. Focal infection should be eliminated routinely without expecting the procedure to lower the pressure.

4. Reduction of obesity is the main dietetic indication. One gram of protein per kilo daily should do no harm unless kidney insufficiency is marked. Salt and water need to be restricted only with edema. The caffein and alcoholic beverages probably do less harm than emotional excitement. And individual testing should prove the pressure-rise from smoking to be enough to matter, before smoking is prohibited.

5. More rest and vacations are frequently advised, hoping to adjust the patient's nervous mechanism to look upon his troubles with more composure. But if there is no heart failure, the patient's morale and general condition will be helped by any exercise that is not attended by dyspnea, indigestion, or precordial distress. In general, we should impose fewer restrictions, and never forget that life has breadth as well as length.

Comment

1. The available evidence seems to indicate that a disturbed balance between the pressor and anti-pressor substances formed in the kidneys, is the cause of the increased peripheral resistance in the renal hypertension of experi-

mental animals, and that it may be the most important cause in the essential hypertension of humans.

2. The hog kidney extracts are still in the experimental stage. But isolation of their active principle may well rival the discovery of insulin in importance.

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"OUR AMERICAN HERITAGE"

HON. JOHN L. McCLELLAN, Former Congressman
Camden

Our present and long standing position of pre-eminence among the nations of the earth, in industrial strength, social order, wealth and health, did not occur by accident. Back of it all has been that indestructible fundamental, that vibrant, mighty force of freedom. From its dynamo, we have generated the current that gave us the power to make the wheels of progress turn and roll onward and upward to higher and greater achievements.

Among the most potent and striking characteristics of this great "Heritage" is included the freedom of individual enterprise, with the hope of enjoyment of earned profits, and the attainment, to a degree at least, of economic independence and security as a reward for and as a result of our own labor and efforts.

This priceless "Right," the greatest of all gifts that any government can bestow upon or guarantee to its people, has been the inspiration and motivating influence, exercised through the channels of individual enterprise that has made America great, so great that we excel all other nations and peoples in progress, wealth and power.

This is particularly true in your profession and in the field of medical science. This "Heritage" operating in the field of medicine has produced miraculous results. Free men in your profession with fearless minds, and inspired in the cause of humanity, have established many schools and laboratories for study and research, and probed and searched far into the unknown for the purpose of conquering man's greatest enemy, disease. Through the years you have been winning this fight by discoveries and improvements and thus you have progressively provided a ever higher standard and quality of medical service to the American people. The remarkable progress made here by the medical profession under our system of free enterprise is directly responsible for giving to our people the highest standard of health and the lowest mortality rate of any other nation. Within the past century the span of life in America has been nearly doubled, from the average of 35 years to the present high of from 60 to 65 years. This shows conclusively that your profession has kept apace with the progress made in all other fields of endeavor, and has

(Excerpts from an address given before Fifth District Medical Society, Camden, Arkansas, October 9, 1941.)

won for you the respect and esteem of all right thinking people and the confidence and gratitude of the nation.

These gains you have made will be greatly extended and increased if the freedom you have enjoyed in the past is continued in the future. But we all know that freedom is not self perpetuating or permanent either in governments or in private enterprise. "Eternal vigilance is the price of liberty," and that price must be paid by every generation that would enjoy and retain its blessings.

From the beginning there have been those who insisted upon a centralized power, a sort of vested government interest with the authority and the right to control and dominate most of life's activities, and especially certain phases of private enterprise. The founders of our government wisely rejected that philosophy. Nevertheless assaults varying in character and intensity have repeatedly been made against the freedom and liberty our Constitution guarantees, and, in spite of the excellent record you have made, the medical profession has not been immune from or escaped attack. Today you are facing a real challenge. Or, should I say the people themselves are facing the challenge, in the numerous proposals and efforts now being made to secure socialized or state-medicine. The trend of most of these so-called reforms, in fact their purpose is and their effect would be to take medical care out of the evolutionary social channels of private enterprise and out of the hands of the private practicing physicians and place it under the domination of federal and state governmental bureaus. Of course, we all recognize there is a need for certain public health or government controlled and supervised work, and no one should or does object to this proper function of government being performed. However, if some of the proposals now offered were adopted, such action would constitute a flagrant encroachment upon the right to life itself in the freedom of choice in selecting the physician in whom the patient reposes his personal confidence. That sacred and confidential relationship that now exists between the patient and the doctor of his choice would suffer an intrusion that is inimical to the freedom that marks the "American way of life." Whenever the government assumes and asserts the right to prescribe the treatment and assign the tax-paid doctor to give it, the medical chart of the patient would become the public record and property of the state and could not remain in the status of confidence with which it

is now treated and regarded. The invasion of the private lives of citizens through a compulsory and governmental imposed authority charged with the responsibility of providing medical care for the people of this nation, will be a form of regimentation that I cannot believe will be conducive to either the advancement of medical science or to the improvement of the health or general welfare of the people.

So far, the medical profession and medical science has not been politically controlled and dominated in America. To the private physician in the pursuit of his private enterprise, human values are of far more importance than any political expedients, and once politics invades the field of medicine and attempts to play an important part in the health of the nation, further progress in this science will be retarded rather than promoted. State-managed politically dominated medicine would simply be another page taken from the totalitarian philosophy of government and engrafted onto our own principles and ideals. We cannot incorporate in our way of life more and more of the principles of totalitarianism without traveling farther and farther in the direction of some form of dictatorship, which we so bitterly abhor. Progress cannot be stopped if freedom is retained in private enterprise, but when and if the light of freedom is ever extinguished in your field of endeavor, stagnation and decay will inevitably follow.

The proponents of state medicine cannot support or strengthen their position by citing the results obtained in other countries that have tried it or now have it. Standards of medical practice have advanced much faster in the United States where it has been kept free from political contamination than it has in countries having state-managed medicine. In Germany and Austria those former world famous institutions of medical training and research have altogether disappeared under totalitarian auspices, and the world looks today to America as the source of greatest opportunity for learning in the sphere of medical science.

In meeting this challenge you of the medical profession have the greatest responsibility. You have the weapon with which to fight, "knowledge." The people will look to you for enlightenment. You have the facts. Give the truth pertaining to your profession and its progress here in America full publicity. Show the contrast between the achievements of state-managed medicine under totalitarian rule with that

you are making in America under this great "Heritage" of private enterprise and freedom. Once the people are well informed regarding the evils and viciousness of some of these proposals, they will surely make the right choice. But remember, "vigilance" is the price you must pay if this "Our American Heritage" is to be retained. Let's all pay the price.

A CALL TO THE MEDICAL PROFESSION

The nation is at war. The Congress has passed an amendment to the Selective Service Act which will call for registration of every man up to the age of 65 and which will place all men under 45 years of age subject to service at the order of the Selective Service boards.

The Procurement and Assignment Service for Physicians, Dentists and Veterinarians was established by order of the President on October 30. Thus the medical profession itself aids in determining proper distribution of the medical profession in supplying the needs of the armed forces and maintaining medical service to civilian communities, public health agencies, industrial plants and other important needs.

At a meeting of the Procurement and Assignment Service held in Chicago at the headquarters of the American Medical Association of December 18, jointly with the Committees on Medical Preparedness of the American Medical Association, the American Dental Association and the American Veterinary Medical Association, plans were drawn for making immediately available to the United States Army and Navy Medical Corps the names of physicians who wish to be enrolled promptly in the service of the government in this emergency.

On the opposite page is published a blank by which every physician may at once place his name with the Procurement and Assignment Service as one who is ready to serve the nation as the need arises. If you wish to make yourself available for classification, fill out this blank and send it at once to Dr. Sam F. Seeley, Executive Director of the Procurement and Assignment Service. When these blanks are received, they will be classified and checked with the information available in the national roster of physicians at the headquarters of the American Medical Association.

For two thousand and nine counties in the United States, lists have been prepared indicating physicians who are engaged in necessary civilian projects, public health services or educational activities from which they cannot be spared. Shortly the rest of the counties will have such lists available.

In each of the corps areas covering the United States a committee is being established, including representatives of medical, hospital, educational, dental and veterinary activities. In the individual states, committees of medical, dental and veterinarian professions are being established through which the corps area committees will exercise their functions. In each county also local committees will provide accurate information regarding the status of each member of the profession concerned.

The raising of the Selective Service age from 28 to 45 will place a great number of additional physicians in the category of those on whom the nation may call as their services are needed. Estimates indicate that some sixty thousand physicians thus become available for service and that forty-two thousand dentists under the age of 45 also become subject to call. By enrolling with the Procurement and Assignment Service immediately, utilizing the blank on the opposite page, all physicians, but particularly those under 45 years of age, insure to every extent possible assignment to the type of service for which they are best fitted. They avoid thus also the possibility of unclassified service with the United States Army during the period that may be necessary following selection by the Selective Service before the commission can be secured. A physician called by the Selective Service who has not enrolled or who is not on a reserve list obviously serves without a commission during the time that necessarily elapses before a commission is secured. In future issues of The Journal announcements will be made regularly of the numbers of those who enroll and of the extent to which the immediate needs of the Army, Navy and other government agencies are being supplied.—Journal A. M. A., December 27, 1941.

COMING MEDICAL MEETINGS

Arkansas Medical Society, Hot Springs National Park, April 27th-29th, 1942.

American Medical Association, Atlantic City, June 8th-12th, 1942.

**ENROLLMENT FORM FOR PROCUREMENT AND
ASSIGNMENT SERVICE FOR PHYSICIANS**

Dr. Sam F. Seeley, Executive Officer
Procurement and Assignment Service
New Social Security Building
4th and C Streets S. W.
Washington, D. C.

Dear Doctor Seeley:

Please enroll my name as a physician ready to give service in the Army or Navy of the United States when needed in the current emergency. I will apply to the Corps Area commander in my area when notified by your office of the desirability of such application.

Signed_____

1. Give your name in full, including your full middle name:
2. The date of your birth:
3. The place of your birth:
4. Are you married or single?
5. Have you any children? If so, how many?
6. Do you believe yourself to be physically fit and able to meet the physical standards for the Army and Navy Medical Corps?
7. Have you filled out previously the questionnaire sent to all physicians by the American Medical Association?
8. When and where were you graduated in medicine?
9. In what state are you licensed to practice?
10. Do you now hold any position which might be considered essential to the maintenance of the civilian medical needs of your community? If so, state these appointments:
11. Have you previously applied for entry into the Army or Navy Medical Service? If so, state when, where and with what result (if rejected, state why).

Signature_____

Date_____ Address_____

TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

THE AMERICAN TRUDEAU SOCIETY

By HAROLD G. TRIMBLE, M.D., President

THE diagnosis of clinically significant pulmonary tuberculosis is readily reached by the average practicing physician if certain fundamental procedures are used. One of the functions of the American Trudeau Society, the Medical Section of the National Tuberculosis Association, is to disseminate among the general medical public information about advances in these procedures. The treatment of tuberculosis in general is a specialized procedure which should at least be initiated with the counsel of a specialist. The American Trudeau Society offers a forum where practitioner and specialist can meet to discuss the technical problems involved as well as their practical applications.

The American Trudeau Society is a natural outgrowth of the American Sanatorium Association. The Sanatorium Association was formed in the days when most of the medical problems, with reference to tuberculosis, revolved around the various tuberculosis institutions and when many of the men in tuberculosis work came by their interest because of their own personal history as tuberculosis patients. With increasing diagnostic facilities and with advances in various forms of treatment, general medical interest in diseases of the chest, including tuberculosis, was significantly increased and many young physicians became interested in these problems as such.

Theoretically, it seemed profitable, and practically it so developed, that contact between what one may call the "pure" specialist in tuberculosis and the internist, who while having other interests was intimately concerned with diseases of the chest, would benefit both. On this basis, then, with the co-operation of the National Tuberculosis Association, the American Trudeau Society was born—an organization of medical men with a nucleus of those interested primarily in tuberculosis and including, also, a group interested in general internal medicine.

The idea of such a society which would be inclusive rather than exclusive, that is, not confined to men who were primarily specialists in diseases of the chest, caught hold among the medical public, as evidenced by the rapid increase in members. Such an organization has a dual responsibility: first, to push forward the already rapidly advancing knowledge with re-

gard to the technical medical as well as public health aspects of tuberculosis; second, to see that the known facts are disseminated even more rapidly among the medical men in general. These functions are best achieved through the work of strong active committees with as wide a geographic distribution as possible, and with a diversity of personnel to bring forth all aspects of the problem at hand. There are but few physicians of prominence in the field of tuberculosis or its closely allied specialties, who are not active members of the Trudeau Society. Members give generously of their time, talent, and information to work out such special problems as may be referred to them, or such as they feel worthy of further investigation and study.

To provide information that is interesting, accurate and well thought through, to avoid mere novelties without overlooking new developments of intrinsic merit, and to review new phases of old problems, is no mean task. Such is the work of our Program Committee in arranging the annual meeting. If attendance is an index, their efforts have been crowned with success.

As new technics develop in the field of laboratory medicine in problems allied with diseases of the chest, it is extremely valuable that the procedures be independently evaluated, not by single individuals but by a group of physicians who are actively working in the same field, and who have the facilities and personnel to try out the particular procedure and evaluate it, without bias or undue enthusiasm. This is a task that

our Committee on Standard Laboratory Procedures does and reports from this group are issued as promptly as possible for our information and guidance.

Developments in the fields of diagnosis and treatment are based largely upon technical developments in allied sciences. It is not always that these newer developments get to the medical student rapidly and effectively. Our Committee on Undergraduate Medical Education, consisting of men who are all experienced in teaching and alive to the needs of both student and medical school, is seeking more effective ways to reach this end.

The problem in post-graduate medical education is somewhat different. Practicing physicians are largely creatures of habit. We change but slowly technics we have learned and used so long. Only when we realize that something is really better, a distinct improvement and not merely different, will it be adopted. The purpose of the Committee on Post-graduate Medical Education is to make available as rapidly as possible knowledge of diagnostic technics in the field of pulmonary disease, particularly where it should be used the most, namely, the office of the physician in general practice. The realization today that tuberculosis in its earliest stages, when it is most curable, must be actually sought for, that it ordinarily is without signs or symptoms, is still somewhat of a mental hazard for men who were taught years ago that fever, cough, sputum, etc., are indicative of tuberculosis, and that proper skill with the eyes, fingers and ears is adequate for diagnosis. As many new methods of using the X-ray become simplified, more readily accessible, and less expensive, the known facts regarding their effective use need to be widely disseminated. The Committee on Post-graduate Medical Education is seeking to analyze the results of actual methods that have already been put into practical use and to get such information not to the tuberculosis specialist alone but particularly to the man in general practice.

New methods of X-ray procedure in the diagnosis of pulmonary conditions are in the course of rapid development. Our Committee on X-ray Apparatus and Technique consists of men actively working in the application of X-rays to tuberculosis as a clinical problem as well as those working on technical improvement in existing apparatus. This group is in a position to evaluate the developments of the X-ray and to give this information to our members and the general medical public.

The tuberculosis sanatorium is, and should be, the focus around which the tuberculosis work of all kinds revolves. As the character of treatment changes, as more technical diagnostic procedures, such as bronchoscopy, develop, and as surgical collapse therapy grows in extent, there must necessarily be some alteration in the physical plant as well as the type of medical care available for the tuberculosis patient. Our Committee on Tuberculosis Sanatorium Standards is now in the midst of evaluating these problems and will be able to report what is considered adequate current practice within the near future.

The American Trudeau Society policy, as originally adopted and reaffirmed upon numerous occasions, has been, that one seeking official certification as a specialist in tuberculosis should have a broad background in internal medicine. To that end the Society has a Committee on Cooperation with the American Board of Internal Medicine.

Thousands of professional workers, such as nurses, social workers, health officers, as well as many more members of the general population, have served as board members of tuberculosis associations, on seal sale committees, and in various other capacities. They have a real interest in the developments of technical problems in the field of tuberculosis. To give them authentic advice, advisory committees have been set up for the purpose of reviewing such literature of the National Tuberculosis Association as is already available as well as checking new publications as they are produced. The Committee on Educational Literature and the Committee on Medical Information must necessarily work in very close relation with these large groups of professional and lay persons interested in the general field of tuberculosis. This work to date has been effective, stimulating and productive of much good result.

This, in outline, is the general philosophy and its practical application as applied to the affairs of the American Trudeau Society. Its work covers those phases of the medical aspects of tuberculosis that are mostly problems for the specialists, as well as those that have special appeal to the physician in general practice. Its effectiveness can continue only insofar as both these groups bring to it their current problems, and working through its committees, bring to bear jointly the sound advice and earnest counsel that is only theirs to give.

The PRESIDENT'S *Page*

Dear Friends:

This space is reserved that I might have the opportunity of expressing my deep appreciation for the splendid manner in which all of you have responded to calls for co-operative support in order that we might arrive at the best solution of some of the current problems of the Medical Profession.

Already eight months have passed in my presidential year. This year will always be a light in my life. These months have been busy ones for all of us. I have officially visited five District Medical Societies and a number of joint society meetings. I wish I might take time to tell you of the fine work of these societies. What an inspiration the attendance at these meetings has been! As doors and hearts have been thrown open to me I realize more fully what a choice lot of doctors live in our state. It is the human touch in this world that really counts.

Congratulations to Mrs. Calvin Churchill and the splendid work she is doing as president of the Auxiliary. It has been a pleasure to observe her work and the work of her organization at some of the district meetings I have attended. The ladies are really going places and they deserve our praise and co-operation.

May I call your attention to the winter Postgraduate Course in Medical Instruction. The Committee has spared neither time nor effort in preparation of the program, their purpose being to provide the highest type of postgraduate instruction possible to be crowded into an intensive two-day program. We all realize that more than ever it is imperative that we keep abreast with trends and achievements in our chosen profession, and these postgraduate courses bring to us at a very minimum cost the best and latest in medicine and surgery.

I think the work of the National Physicians Committee for the Extension of Medical Care is very important. It is the Fighting Arm of American Medicine. Realizing that, more than anything else, public opinion shapes the destiny of our standards of accomplishment, this organization is keeping its fingers on the pulse of Congress and public sentiment and working diligently in defining and clarifying political control of Medicine, in unifying the Medical Profession, and in informing the public. The best way to elevate Medicine is to teach the people what good Medicine is and to strive, as is constantly being done by the profession, to elevate Medicine itself. I urge each of you to line up with the work of this Committee.

You know that at this moment America is full of the one subject of National Defense, and National Security, and National Destiny. We are living in a period of human development when patriotism is no longer a matter of waiving a flag and singing a song, or even marching off to war in uniform. Today the highest patriotism is the

simplest of all jobs, and that is devotion to the day's work, a pouring of all that we are and all that we have into the job that we have to do, because today the war and national security are embodied in the industrial and business concept of greater efficiency, greater production, greater achievement, and greater accomplishment. Necessary to all these are greater health facilities for our populace.

There are 130 million people in this country and our responsibility as doctors is to guard their health. In these times of National Peril demands are being made on our time in an ever-increasing scale due to the fact that so many physicians are leaving practice for military service.

A war activity which especially calls for the whole-hearted assistance of the Medical Profession is the Organization for Civilian Defense. The activities of this organization are concerned primarily with the protection of lives and property in the event of enemy action. To the Medical Division is entrusted the responsibility for the preparation of plans for Civilian Defense designed to prevent or alleviate the medical and public health hazards to which the civilian population may be exposed.

Even though we were not at war, such an organization would be most effective in handling situations that arise in other times of disaster, such as floods, tornadoes, or similar catastrophe. With the United States at active warfare it is vital that all Americans do their part in the defense of our Nation. Throughout its history the Medical Profession has always remained loyal to its country. There is more need for this loyalty now than at any time in our history. Let us as an organized group and as individual doctors help in every way possible in the Organization for Our Civilian Defense.

Considerable sacrifice will have to be made by our profession, but every doctor in Arkansas is, I am sure, willing to undergo sacrifice and hardship to preserve our way of life.

Someone has said:

"A good thing to remember,
And a better thing to do,
Is work with the construction gang,
And not the wrecking crew."

It gives me real pleasure to know that all of you belong to the "Construction Gang," and that our State Medical Society is one of the most progressive Medical Organizations in this country.

May I extend heartiest good wishes for a continuation of very enjoyable meetings and for every happiness to you personally the coming year.

Sincerely yours,
H. FAY H. JONES,
President, Arkansas Medical Society.

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W. R. BROOKSHER, M. D., Editor
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EDITORIAL COMMENT

PROPOSED CONSTITUTIONAL
AMENDMENT

The following amendment to the Constitution
was presented to the House of Delegates at the
1941 session and is published here as second
notice to the membership.

ARTICLE VI

To amend the first sentence which now reads:
"The Council shall consist of the Councilors,
and the President and Secretary, ex-officio."

To read:

"The Council shall consist of the Councilors,
the President, the Secretary, the President-Elect
and the Treasurer."

THE 1942 ANNUAL SESSION

The Council of the Arkansas Medical Society
has voted to accept the invitation of the Garland
County Medical Society to hold the 1942 annual
session in Hot Springs National Park. Dates of
the meeting have been assigned as April 27th,
28th, and 29th, 1942. A considerable portion
of the scientific program has been arranged but
members who desire to present papers before
the session are urged to immediately advise
Dr. H. King Wade, Chairman, Committee on

Scientific Work, Hot Springs National Park, in
order that space may be held for their presen-
tation.

RESOLUTION

God in his infinite wisdom has called Dr.
N. S. Word.

He was an active member of the Ouachita
County Medical Society for many years, and
we mourn the loss of our friend and member
with deepest sorrow.

Dr. Word spent the greater part of his life
administering to suffering humanity. He was
always ready to lend a listening ear and a
helping hand to those in distress. His service
on earth is ended.

THEREFORE, BE IT RESOLVED, that in the
passing of Dr. N. S. Word, the Society has lost
one of its most valuable members, and the
country, one of its most useful citizens.

BE IT FURTHER RESOLVED, that the Secre-
tary be instructed to spread this resolution on
the permanent records of the Society, and that
a copy of this resolution be sent to the family
of our departed brother as evidence of our
respect and esteem for him, and as a token of
our sympathy in their bereavement.

Dated this seventeenth day of November,
1941.

J. S. RINEHART, M. D.
R. C. KENNERLY, M. D.

STATE SANATORIUM SCHEDULE

For the benefit and information of members
who may be interested in availing themselves
of the educational opportunities of a visit to the
State Sanatorium, The Journal is again printing
the schedule of medical activities at the institu-
tion.

Monday A. M.—Pneumothorax and surgery
(intra - pleural pneumolysis, phrenic - exeresis,
etc.).

Tuesday, A. M.—Pneumothorax.

Tuesday, 2:00 P. M.—Preliminary staff meeting.

Wednesday, 9:00 A. M.—Regular staff meeting.

Wednesday, 6:15 P. M.—Surgical staff meeting.

Thursday, A. M.—Surgery.

Friday, A. M.—Pneumothorax.

Saturday, A. M.—Surgery (Intra-pleural pneumo-
lysis, phrenic-exeresis, etc.).

Dr. J. D. Riley, Superintendent, has advised
The Journal that members are welcome to all of
the medical activities at the sanatorium and that
quarters are available for those who wish to
stay while they observe the methods in use.

PROCEEDINGS OF SOCIETIES

By receipt of membership assessments in the office of the state secretary on November 22nd, Drew County Medical Society holds the honor of being the first county medical society to report for 1942. The society reports 100% paid-up memberships. Officers elected are: President, A. S. J. Clark; Secretary-Treasurer, J. B. Holder; Delegate, R. D. Dickins; and Alternate, J. S. Wilson.

The Tri-County Clinical Society was addressed at Hope, November 20th, by H. Fay H. Jones, Little Rock, "Some of the Current Problems of the Medical Profession," and by D. A. Rhinehart, Little Rock, "Ways in Which the Roentgenologist May Be of Help to Private Practitioners."

The Arkansas Society for Crippled Children was addressed November 19th by W. Myers Smith and T. T. Ross, Little Rock.

The Pulaski County Medical Society entertained in honor of President H. Fay H. Jones and Past-Presidents M. E. McCaskill, M. L. Norwood, W. T. Wootton, Frank Vinsonhaler, O. J. T. Johnston, and A. S. Buchanan at dinner November 26th. The scientific program was presented by Joseph W. Kelso, Oklahoma City, "Repair of Third Degree Lacerations."

The Ninth Councilor District Medical Society met in luncheon session at Harrison, December 3rd. The following program was presented: "Some Current Problems of the Medical Profession," H. Fay H. Jones, Little Rock; "Fungus Infections," M. J. Kilbury, Little Rock; "Cirrhosis of the Liver," A. F. Hoge, Fort Smith; and "Compound Fractures," S. J. Wolfermann, Fort Smith. The Society will next meet at Harrison, June 3, 1942.

Craighead-Poinsett County Medical Society has elected the following officers: President, E. J. Stroud; Vice-President, L. H. McDaniel; and Secretary-Treasurer, J. C. Faris.

Faulkner County Medical Society has elected the following officers: President, E. L. Dunaway; Vice-President, J. H. Downs; Secretary-Treasurer, J. S. Westerfield, re-elected for the 39th consecutive term; Delegate, N. E. Fraser; and Alternate, C. H. Dickerson.

Miller County Medical Society has elected the following officers: R. R. Kirkpatrick; Vice-President, H. E. Murry; Secretary-Treasurer, J. W. Burnett; Censor, T. F. Kittrell; Delegate, B. C. Middleton; and Alternate, L. J. Kosminsky.

The Saint Francis County Medical Society met in annual session at Forrest City, December 9th, electing the following officers: President, C. N. Bogart; Vice-President, J. S. Davidson; Secretary-Treasurer, J. O. Rush; Delegate, J. O. Rush; and Alternate, C. N. Bogart.

J. O. Rush, Secretary.

Jefferson County Medical Society has elected the following officers: President, O. C. Hankinson; Vice-President, H. A. Causey; and Secretary-Treasurer, W. A. Snodgrass, Jr.

Ouachita County Medical Society has elected the following officers: President, R. C. Kennerly; Vice-President, Perry Dalton; Secretary-Treasurer, R. B. Robins; Delegate, S. A. Thompson; and Alternate, J. P. Clemens.

Mississippi County Medical Society has elected the following officers: President, J. E. Beasley; Vice-President, A. E. Robinson; Secretary-Treasurer, T. K. Mahan.

Pulaski County Medical Society has elected the following officers: Grady W. Reagan, President; Hoyt R. Allen, Vice-President; T. Duel Brown, Secretary; and R. J. Calcote, Treasurer. At the December 8th meeting, the retiring president, E. H. White, gave as his presidential address, "The History and Achievements of the Pulaski County Medical Society."

T. Duel Brown, Secretary.

The Sebastian County Medical Society was addressed December 9th by R. E. Schirmer, "Venereal Disease Control." The following officers were elected: President, B. L. Ware, Greenwood; Vice-President, Hugh Johnson, Fort Smith; Secretary, W. F. Adams, Fort Smith; Treasurer, W. R. Brooksher, Fort Smith, and Members of Board of Censors, I. F. Jones and S. J. Wolferman, Fort Smith.

W. F. Adams, Secretary.

By formal action of the two societies, the Cleburne County Medical Society has disbanded and its membership has affiliated with the Independence County Medical Society. The Inde-

pendence County Medical Society has elected the following officers: President, W. J. Ketz; Vice-President, M. S. Craig; Secretary-Treasurer, C. A. Churchill; Delegate, C. A. Churchill; and Alternate, O. J. T. Johnston.

The Arkansas Society of Obstetrics and Gynecology was organized at a meeting held in Little Rock, December 18th. Officers are: President, E. H. White; Little Rock; Vice-President, Clyde D. Rodgers, Little Rock; and Secretary-Treasurer, Ruth Ellis Lesh, Fayetteville.

REGISTRATION FEE DUE

Members are reminded that the 1942 registration fee of two dollars is now due and should be paid to Dr. D. L. Owens, Harrison, Secretary, The State Medical Board of the Arkansas Medical Society. The Board has assessed a penalty of one dollar for all registration fees received after January 15th, 1942.



ERNEST LAFAYETTE HANDLEY, aged 48, of Pocahontas, died in a Jonesboro hospital December 9th. A graduate of the Kansas City College of Medicine and Surgery in 1920, he had practiced in Pocahontas for a number of years and was formerly coroner of Randolph county. Surviving relatives are his wife, a son and two daughters.

JAMES ANDERSON BURKS, aged 66, died at his home in Benton December 20th. Born in Georgia July 22, 1875, he graduated from the College of Physicians and Surgeons in Little Rock in 1910 and had practiced in Saline county ever since. In addition to his membership in the Saline County Medical Society and the Arkansas Medical Society, he was a member of the Masonic and Odd Fellow lodges. Surviving relatives are his wife, five sons and two daughters.



FOURTH ANNUAL CONGRESS ON INDUSTRIAL HEALTH

Arrangements have been largely completed for the fourth annual Congress on Industrial Health sponsored by the American Medical Association, which will be held Monday and Tuesday, Jan. 12-13, 1942, at the Palmer House in Chicago. These meetings are open to physicians and others interested in industrial health. There is no registration fee.

PERSONALS AND NEWS ITEMS

"Use of Various Sulfanilic Acid Derivatives in Trachoma" was presented before the Section on Ophthalmology and Otolaryngology at the recent Saint Louis session of the Southern Medical Association by K. W. Cosgrove and L. K. Hundley, Little Rock.

"A Correlated Study Guide for Medical Students" was presented before the Section on Medical Education and Hospital Training at the recent Saint Louis session of the Southern Medical Association by E. Lloyd Wilbur and Paul C. Eschweiler, Little Rock.

W. B. Grayson, Little Rock, was one of the discussants of the paper, "The Present Status of Teaching Preventive Medicine and Public Health in Our Medical Schools," presented before the American Public Health Association at its recent Saint Louis session.

The following scientific exhibits were presented at the Saint Louis session of the Southern Medical Association: "Cataract and Other Ocular Changes Resulting from Tryptophane Deficiency," John R. Totter, Paul L. Day, and K. W. Cosgrove, Little Rock; "Trachoma Control in Arkansas," L. K. Hundley and K. W. Cosgrove, Little Rock; and "Intestinal Obstruction," J. K. Donaldson, Little Rock.

Elizabeth Fletcher, Little Rock, recently addressed the Arkadelphia Branch, American Association of University Women, on "A Program for Mental Hygiene."

The following have been elected directors of the Dickson Memorial Hospital at Paragould: J. A. Dillman and Earle D. McKelvey.

F. Walter Carruthers, Little Rock, delivered the chairman's address, "Historical Review of Metals Used in Bone and Joint Surgery," before the Section on Bone and Joint Surgery at the Saint Louis session of the Southern Medical Association.

H. King Wade, Hot Springs National Park, was one of the discussants of the paper, "The Technique of Pyelography," presented by H. McClure Young, Columbia, Missouri, before the Saint Louis session of the Southern Medical Association.

Hoyt R. Allen, Little Rock, was one of the discussants of the paper, "The Relationship of Mineral Oil Laxatives and Saline Cathartics to Anorectal Infections and Their Treatment," presented by Geo. H. Thiele, Kansas City, before the Saint Louis session of the Southern Medical Association.

The following were elected to fellowship in the American College of Surgeons at the Boston convocation: T. Duel Brown, C. C. Reed, Jr., Carl A. Rosenbaum, and Harvey Shipp, all of Little Rock.

H. V. Stewart, Little Rock, spent a recent vacation touring eastern seaboard states.

W. B. Prothro, Arkadelphia, has been relieved of duty with the Army Medical Corps.

A. M. Washburn has been ordered to duty as Lieutenant-Colonel, Army Medical Corps, and assigned at Fort Jackson, South Carolina.

H. King Wade, Hot Springs National Park, has been elected to membership in the University of Tennessee chapter of Alpha Omega Alpha, national honor medical fraternity.

Harry Hayes, Little Rock, visited in Kansas City and Halstead, Kansas, during November.

J. H. Bohannon, Berryville, has been appointed Carroll county chairman for the Infantile Paralysis Foundation.

Earle D. McKelvey recently addressed the Jonesboro Rotary Club.

Fred H. Krock, Fort Smith, and Harvey Shipp, Little Rock, have been called to duty as Lieutenant-Commander and Lieutenant (j. g.), U. S. Naval Medical Corps, and assigned to the Air Base, Corpus Christi, Texas.

Kirk Mosley recently addressed the Jonesboro Kiwanis Club.

L. B. Jones, Ozark, has been transferred to Benton.

C. A. Rosenbaum, Little Rock, recently addressed the Co-operative Club on "Cancer."

R. H. Willett has been elected a director of the Jonesboro Country Club.

T. E. Buffington has been elected a director of the Benton Chamber of Commerce.

Henry G. Hollenberg, Little Rock, has been elected a member of the Southern Surgical Association.

D. W. Goldstein, Fort Smith, attended the American Academy of Dermatology in New York City during December.

Fred H. Krock, Fort Smith, attended the Southern Surgical Association at Pinehurst, North Carolina, in December.

"Historical Review of Metals Used in Orthopedic Surgery" by F. Walter Carruthers, Little Rock, appeared in the Southern Medical Journal for December.

R. Q. Patterson, Little Rock, spent a recent vacation fishing off the Florida coast.

THE "SULFA" DRUGS

In 1937, sulfanilamide became available generally and proved to be extremely useful in the treatment of infections due to *B. hemolytic streptococci* and *meningococci*. In addition, the drug soon was being employed in urinary tract infections, trachoma, chancroid, lymphogranuloma venereum, and certain cases of gas gangrene, and it demonstrated some benefit in gonorrhea, undulant fever, and actinomycosis. Approximately two years later sulfapyridine was being widely used in the treatment of pneumococcal infections and was found to be more effective than sulfanilamide against gonococci. After only another year sulfathiazole begun to replace sulfapyridine because it was as effective against pneumococci and gonococci, more effective against staphylococci, and occasioned fewer reactions. In urinary tract infections sulfathiazole was superior to sulfanilamide in most cases. Now sulfadiazine is being introduced and it has the advantage of a lower index of toxicity, which makes possible the maintenance of high blood levels.

This group of drugs has become exceedingly widely employed. Soon there will be only a small proportion of the general population which has not received one of them as treatment of some variety of infection (South. M. J., 34:1214, 1941). It behooves the physician to choose carefully the most specific and least toxic one for his case. A wide variety of dosage forms have been made available by Eli Lilly and Company.

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ARKANSAS OWNED AND OPERATED

RANDOM THOUGHTS OF THE SECRETARY

November 26th. Harry Hayes is an office visitor this morning bringing tales of Hertzler and notables to the north. The Pulaski County Society holds President's Night tonight and there is much of conviviality, but Harry is not among those present. Interested obstetricians in attendance are T. Duel Brown, Hoyt Allen, Walter Caruthers, Paul Mahoney, Myers Smith, and R. Q. Patterson. Travelling homeward we meditate over the time factor involved in a speed limit of 50 miles per hour with which we cooperate and reach the domicile not over 20 minutes later than had we streaked along at our customary 60. Too, surprised how few cars pass us in this 160 miles and believe the Highway Department and the Governor are having fairly good support from the motoring public.

November 27th. Turkey Day with an opportunity to give thanks more earnestly than ever for the blessings of America; that citizenship is not denied us; that we do not tread muddy, frigid steepes nor the torrid Libyan desert giving all in defense of homeland. To the stadium where the Hot Springs Trojans defeat the hometown boys, and where Creighton and Russell, Trojan coaches, attain a record in yardage traveled up and down the side lines in argumentative combat with the officials.

November 30th. To Tulsa's ice rink where the youngster continues his experiments in the maintenance of equilibrium whilst endeavoring to make forward progress in the erect posture on ice skates, a feat we find far more interesting as a spectator than as a fellow seeker of experience. To Bill's Hut which offers good food and thence away, non-stop, Tulsa to Fort Smith with but passing glances for Oklahoma President Ewing's hometown of Muskogee as we cruise along.

December 3rd. To Harrison for a most enjoyable meeting of the Ninth Councilor District Society; a trip made more pleasant by the drive with Wolfermann and Hoge and profitable to us in medical knowledge obtained. Through the efforts of D. L. Owens we acquire machinery with which to set up in our home a miniature Phillips County Benefit Association and all will go well until the Governor hears about it.

December 7th. Amis presents himself on furlough, only started on rounds of visits when comes the news of the treachery of the slant-eyed yellow men from the east, a nation which has rattled the sword for ten years and today attains the ultimate in stealth and dirty deceit. For

all of us in this hour a silent prayer that we may be permitted to insure for the whole world the right of life, liberty and the pursuit of happiness.

December 8th. Our birthday is made relatively unimportant by the day's news, but in the evening would come the Foltz's, the Chamberlains, Amis and the Mose Smith's, completely taking us by surprise but making it a gala day in all respects. Amis, hardened to the whims of navy life, needs depart abruptly when called back to duty.

December 9th. Schirmer talks on venereal disease control at the county society presenting startling facts on the problem and causing us to realize what a sheltered life we have lived for some several years.

December 12th. In a steady downpour we drive to Little Rock where an assembled committee does well in a start toward establishing emergency medical service for civilians. The satisfactory and successful operation of this plan, upon which many lives may at some unfortunate day hence fully depend, rests with the organized medical profession—you and your every colleague. Tonight guests of the Bob Robins to hear Fishbein, in rare form indeed, speak to the Executive's Club, somewhat nonplussed to realize that executives are men we already knew. With assurance and convincing detail, Bob introduces Dr. Pepys, lapsing but once, and that when he referred to Fishbein as "discriminating," an adjective which Bob, of all folks, should know did not aptly portray the Editor of The Journal of the American Medical Association when he went house-buying from the Phi Chi fraternity in 1918, at which time Robins was one of the fratres in residence. The speaking done, and never better at that, we adjourn for the afterglow with the Jones, the Hoyt Allens, the Robins and others, a most pleasant gathering. For Duel Brown's benefit, the secretary negotiated the homeward miles in a breezy manner, not in the slightest disturbed over the 7 cars we saw in ditches along the way.

December 13th. Of quibbling and bickering over the defenses of this country we shall have no part. America now needs more of us than patriotism, our fortune, our service, our risk of life. It needs in great degree, our confidence, our patience, our grim determination. Lest rumors harm us, we must and shall remain calm. We must defer judgments in the face of rumors, incomplete facts or untruths. When all this shall have been done we will have gone a long way toward establishing an enduring morale for the battles which lie ahead.

WOMAN'S AUXILIARY PAGE

MRS. RALPH CROSS, Publicity Secretary, Texarkana

Mrs. Calvin A. Churchill, Batesville, president of the Woman's Auxiliary of the Arkansas Medical Society, who visited the Sebastian County Medical Society Auxiliary, December 3rd, was honored at a luncheon in the Gold Room of the Ward Hotel at 12:30 o'clock.

Mrs. Charles T. Chamberlain, president of the Hostess Auxiliary, conducted a short business session, and then introduced Mrs. Churchill, who spoke on "Auxiliary Work."

"There are 75 counties in the state of Arkansas," Mrs. Churchill said, "with 60 medical societies and 22 auxiliaries." She urged organization of more auxiliaries, and stressed the importance of the public health relations meetings.

Mrs. Churchill has visited 12 of the 22 auxiliaries of the state and will have visited all of the 22 before the state convention in May, she said.

Guests at Wednesday's luncheon were: Mrs. Charles T. Chamberlain, Mrs. W. R. Brooksher, Jr., Mrs. Thomas P. Foltz, Mrs. M. E. Foster, Mrs. S. J. Wolfermann, Mrs. J. S. Southard, Mrs. Walter Eberle, Mrs. A. F. Hoge, Mrs. H. H. Smith, Mrs. I. F. Jones, Mrs. R. E. Schirmer, Mrs. S. P. Stubbs, Mrs. W. J. Nelson, Jr., Mrs. J. L. Kellum, and Mrs. W. F. Rose.

Out-of-town guests were: Mrs. G. G. Woods, Huntington; Mrs. B. B. Bruce, Alma; Mrs. B. L. Ware and Mrs. C. W. Hall, Greenwood.

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The Auxiliary's January meeting will be eliminated, Mrs. W. F. Rose, publicity chairman, has announced.

MRS. W. F. ROSE,

Publicity Chairman of the Auxiliary of the
Sebastian County Medical Society.

Mrs. James M. Kolb, president of the Johnson County Medical Society Auxiliary, entertained the members and guests of the Auxiliary with a dinner given at the Arlington hotel December 4th. The dinner was given in honor of Mrs. Calvin Churchill of Batesville, who is president of the Woman's Auxiliary to the Arkansas Medical Society.

Following the dinner, a meeting was held at the home of Mrs. Kolb. Mrs. Churchill gave a very interesting talk on Auxiliary work.

The following members of the group were present: Mrs. Guy Shrigley, Mrs. G. R. Seigel, Mrs. G. L. Hardgrave, Mrs. James S. Kolb, and Mrs. Earle Hunt. Mrs. L. Gardner of Russellville, who is a member of the Johnson County Auxiliary, also attended the dinner and meeting.

"Every Doctor's Wife in Health Defense," is the slogan of the Woman's Auxiliary to the American Medical Association for the year, the health of the people, is the strength of the nation, therefore health education is one of the principal aims of the Medical Auxiliary.

Public Relation Meetings, programs on "Nutrition," placing the health magazine "Hygeia," in all of the public schools, both white and colored, in Texarkana, Arkansas and Texas, in the Public Library and other public places, so, that the public will be better informed.

County and State Health Essay contests in the public schools, to encourage birth registration, periodic health examinations, etc., are projects in health defense, sponsored by the Auxiliary.

Donations to the Student Loan Fund, to the Cancer Control Fund, to the Memorial fund for widows and children of indigent doctors, to the Library Fund for the Tuberculosis Sanitarium, etc., are all worthwhile interests promoted by the Bowie and Miller Counties Medical Auxiliary.

MRS. L. H. LANIER,
County President, Texarkana.

The Tri-County Medical Auxiliary and Society met at Hope, November 20th, for dinner served at the Diamond Cafe. After dinner members of the Auxiliary gathered at the home of Mrs. T. G. Martindale. The Auxiliary was especially honored by the presence of the state president, Mrs. C. A. Churchill, who gave an interesting and inspiring talk on auxiliary work. The following committees were appointed: Program, Mrs. J. B. Hesterly, Prescott; Press and Publicity, Mrs. L. J. Harrell, Prescott; Hygeia and Doctor's Day Observance, Mrs. Jim McKenzie, Hope; and Public Relations, Mrs. T. G. Martindale, Hope. Each member pledged support to the Cancer Control Program and to subscribe to the Bulletin. Refreshments were served at the close of the meeting.

MRS. J. W. KENNEDY.

The Medical Auxiliary held their tea at the home of Dr. and Mrs. M. G. Lawson on Pecan street on December 7th. Husbands and children of members and a limited number of guests were invited.

Co-hostesses with Mrs. Lawson were: Mrs. C. E. Kitchens, Mrs. R. H. T. Mann, Mrs. Joe E. Tyson, Mrs.

Roy F. Baskett, Mrs. H. E. Wilson and Mrs. R. W. Pickett.

Mrs. Allan Collom, Jr., chairman of the entertainment committee, arranged plans for decorations and a Christmas program. The home has four lovely mantels, which were featured in the decoration scheme as follows: The quaint Victorian mantel was decorated by Mrs. Ralph Cross; the French Provincial mantel was arranged by Mrs. Allan Collom; the Christmas scene, with Santa and the reindeers, tinsel and tulle, by Mrs. R. R. Kirkpatrick, and the dining room mantel, featuring the Modern Madonna, was done by Mrs. Reavis Pickett. The dining room was completed with artistic decorations symbolic of Christmas, carrying out a green and white theme, arranged by Mrs. C. E. Kitchens and Mrs. Joe Tyson. The room was entirely lighted with white tapers. Mrs. T. F. Kittrell and Mrs. William Hibbits presided at the tea table, during the first hour, and Mrs. E. M. Watts and Mrs. L. H. Lanier, the second hour. Mrs. Roy Baskett had charge of the refreshments.

Special features of the entertainment included the showing of home sound movies by Dr. Allan Collom and piano selections by Dr. J. Wirt Burnett.

Mrs. H. E. Wilson had charge of the Christmas gifts and decorated the box for the gifts.

Woman's Auxiliary to the Bowie and Miller Medical Societies entertained with a beautifully appointed seated tea Wednesday afternoon at the home of Mrs. S. W. Alston, 1804 Beech Street, complimenting Mrs. L. H. Lanier, president of the organization. Hostesses were Mrs. A. G. Lee, Mrs. Allan Collom, Jr., Mrs. William Hibbits, Mrs. J. T. Robison and Mrs. C. H. Frank.

Mrs. Will Tyson of New Boston gave a delightful review of the book, "Royal Regiment," by Gilbert Frankau.

The reception rooms were decorated with bronze and yellow chrysanthemums in artistic combination. The dining room held baskets and bowls of fuchsia chrysanthemums.

The table, covered with a lovely cloth, held as a centerpiece a beautiful tiered epergne filled with autumn flowers and fruits. Pompom chrysanthemums and roses were included in the lovely arrangement. Mrs. Lanier presided and directed the serving of delicious refreshments, after which she called members to order for a brief business session.

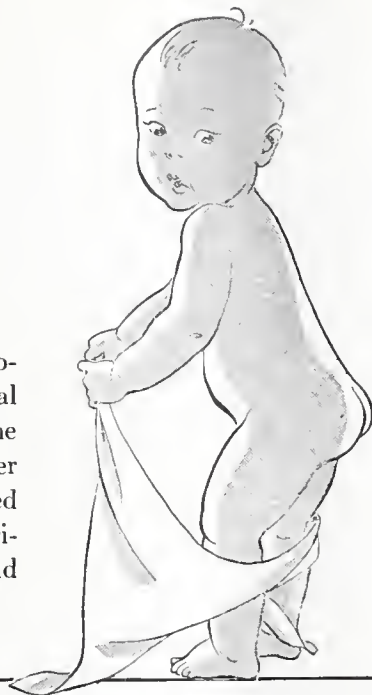
Present, in addition to the hostesses, were Mrs. M. G. Lofton, Mrs. J. K. Norman, Mrs. Ralph Cross, Mrs. Harry Murry, Mrs. R. H. T. Mann, Mrs. Wallace H. Bassett, Mrs. H. L. Williams, Mrs. W. V. Bessonette, Mrs. Roy Baskett, Mrs. L. H. Lanier, Mrs. C. E. Kitchens, Mrs. Joe Tyson, Mrs. E. M. Watts, Mrs. P. L. Wermer, Mrs. Sophie Seldman and Mrs. Elsie Seldman.

The Auxiliary of the Ninth Councillor Medical Auxiliary met December 3rd at the Hotel Seville, in Harrison, in a joint luncheon with the doctors. Mrs. Max Rust entertained with vocal selections during the luncheon, accompanied by Mrs. Frank Pettit. Mrs. Pettit also gave several piano selections.

The Auxiliary meeting was presided over by Mrs. D. K. McCurry, of Green Forest, in the absence of Mrs. Ross Fowler, chairman. Mrs. H. V. Kirby acted as secretary. Nine members answered to roll call with a 100% health examination report.

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Mrs. McCurry, Public Relations chairman, reported extensive work in Red Cross, U. S. O., library benefit, public health, P. T. A., and local clubs.

It was ordered that \$1.00 be sent to the Library Fund, and that \$5.00 be given to the Oates Student Loan Fund. Mrs. Henry Kirby and Mrs. Ross Fowler were the committee for Doctor's Day observance in March.

The following officers were elected: Mrs. J. H. Fowler, Harrison, President; Mrs. Ulys Jackson, Harrison, Pres.-Elect; Mrs. A. L. Carter, Berryville, Vice-President; and Mrs. Henry Kirby, Harrison, Sec.-Treasurer.

Mrs. J. H. Fowler appointed the following committees: Constitution and By-Laws, Mrs. J. G. Gladden; Physical Health, Mrs. Ulys Jackson; Courtesy, Mrs. M. E. Rust; Public Relations, Mrs. A. V. Adams; Health Exhibits, Mrs. D. K. McCurry and Mrs. J. G. Gladden; Memorial, Mrs. D. L. Owens; Doctor's Day Observance, Mrs. H. V. Kirby and Mrs. Ross Fowler; Cancer, Mrs. R. E. Fowler; New Legislation, Mrs. D. K. McCurry; Library Fund, Mrs. A. L. Carter; Oates Loan Fund, Mrs. D. L. Owens.

Mrs. A. L. Carter of Berryville gave an interesting paper on "Nutrition in Defense." Mrs. Fowler gave a poem, "Guess What."

The meeting adjourned until June, 1942.

The Independence County Medical Society and Auxiliary met last night at the Country Club for a dinner and Christmas party. Hostesses were Mesdames O. J. T. Johnston, C. G. Hinkle, M. S. Craig, R. C. Dorr and Paul Jeffery of Bethesda.

Places were laid for thirty-two at the table which was centered with a Christmas scene featuring Santa Claus in his reindeer-drawn sleigh. Christmas wreaths and other symbolic ornaments further accented the table. Places were marked for thirty-two by Santa Claus salads when the guests were seated for the delicious turkey menu.

In the lounge a beautifully decorated Christmas tree held the center of attention. Presents for every one were taken from the tree and distributed. Mrs. C. A. Churchill, president of the Arkansas Medical Auxiliary, was presented by the Batesville Auxiliary with a beautiful antique water pitcher of Thousand Eye design.

During the evening a number of contests entertained the group. Winners during the evening included Dr. J. J. Monfort, Mrs. Louis Buell, Dr. O. J. T. Johnston, Mrs. Ralph Weddington, Mrs. Monfort, Mrs. Finis Q. Wyatt, Mrs. Churchill and Mrs. O. L. Bone of Newark.

BOOK REVIEWS

Cardiac Clinics: By Frederick A. Willius, B. S., M. D., M. S. in Med., Head of Section of Cardiology, Mayo Clinic, and Professor of Medicine, Mayo Foundation for Medical Education and Research, Graduate School of the University of Minnesota, Rochester. Pp. 276. Illustrated. Saint Louis: C. V. Mosby Company, 1941.

This is a collection of informal discussions on heart disease previously published in the proceedings of the staff meetings of the Mayo Clinic. From a vast amount of original material in cardiology, selections have been made which will be of interest to practitioners as well as to cardiologists. Each chapter deals with a particular type of heart disease and presents a case history and discussion with follow-up notes. As such it is not intended to be either a textbook or a reference work. It is suited for a busy practitioner who must needs be informed of advances in cardiology.

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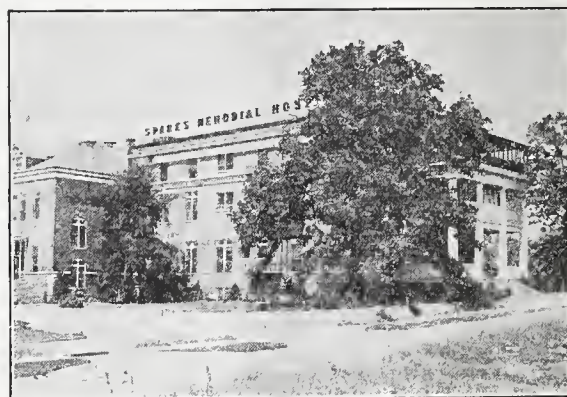
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No. 9

TREATMENT OF GOITER *

GEORGE V. LEWIS, M. D.
Little Rock

Since goiter has been a recognized entity, there have been numerous classifications, but these have been pathological in character rather than clinical. The American Society for the Study of Goiter has suggested a clinical classification, but one suggested by Davidson is perhaps better because of its extreme simplicity. Davidson chooses to classify the hyperplastic gland as ACUTE GOITER, and the degenerative gland, which also may show some hyperplasia, as the CHRONIC GOITER. The acute goiter is, of course, what was formerly called the exophthalmic or diffuse toxic goiter; and the degenerative, or chronic, is what was called the toxic or nontoxic adenoma, the more recent terminology being nodular goiter. The acute goiter as, is well known, has a very rapid onset in contrast to the insidious development of the chronic type wherein it is difficult to tell just when the adverse affect on the host has begun.

There are certain proved facts that apply to all goiters. Always excepting the hypertrophy of the thyroid gland during adolescence which is a physiological response, there is no such thing as an innocent goiter. Goiter is a cyclic disease, and the size of the goiter bears no relation to the symptoms manifested nor to the damage that might be done to the host. It must always be remembered that the entire thyroid is involved in these types of goiter—not just part of it.

I want to emphasize that former classifications were based upon the microscopic picture and did not take into consideration the clinical picture. It has been difficult for the pathologist and the clinician to harmonize their microscopic and clinical findings which has caused great confusion. Such confusion will exist until the path-

ologist has been convinced of the necessity for coordinating his findings with those of the clinician.

More and more we are being impressed with the fact that the diagnosis of goiter rests upon clinical observation. Because two personal equations are involved, a metabolic rate is perhaps one of the least accurate of our laboratory tests. As cooperation of the patient is a large factor, he can change the result of a metabolic test as he cannot change, for example, his blood picture. Further, since goiter is a cyclic disease, in the depression phase of the cycle, which so often is encountered in acute goiters, the basal metabolic reading will not be elevated. Further, we must remember that this test merely measures the basal metabolic rate; it in no way indicates the toxicity present in the degenerative type of goiter. Even with a negative basal metabolic rate, there may be toxicity due to a chronic degenerative process in the thyroid gland. Briefly, then, my point is that a repeatedly positive basal metabolic rate is certainly indicative of hyperfunction of the thyroid gland, but a negative basal metabolic rate does not by any means eliminate an active disease process.

If we are going to treat these patients successfully, we must recognize certain pathological and physiological changes produced by goiter. We must consider that:

1. There may or may not be a disturbed basal metabolism.

2. There may or may not be the so-called thyrotoxic heart from long-standing toxemia.

3. The blood cholesterol usually, but not always, is inversely proportional to the basal metabolic rate and to the clinical symptoms.

4. It has long been known that there is a decreased dextrose tolerance in patients with toxic goiters. This is attributed to a failure of the liver to store dextrose properly. Many years ago it was first noticed that jaundice developed in numerous patients having toxic goiters. Since 1933, through the efforts of Boyce and Mc-

* Presented, with lantern slides and motion pictures, before the Sixty-sixth Annual Session, Arkansas Medical Society, Little Rock, April 14, 1941.

Fetridge¹ and others, by using the quick hippuric liver function test, functional disturbance of the liver in these patients has been repeatedly demonstrated. More recently, Chaffer,² and Lord and Andrus³ have demonstrated the anatomical and functional impairment of the liver present in most patients with toxic goiter. In our own experience, the hippuric acid test failed on several occasions to reveal any excretion in the four-hour period. Two-thirds of our cases revealed a hippuric acid secretion below three grams. All of these patients under the indicated treatment improved preoperatively until the hippuric acid in four hours was at least three grams. One of these patients, a male, age 38, with an acute goiter, in which step operations were done, died the day of the operation after removal of the last of the thyroid. No post-mortem was obtainable, but it was thought that death was due to a thyroid crisis and circulatory collapse.

5. In addition, as noted by Lord and Andrus, there may be a marked fall in the prothrombin time after thyroidectomy.

6. The blood iodine may be increased in hyperthyroidism. However, Lahey and Bartels have shown that if the toxic goiter has existed for longer than a year, the blood iodine may be about normal in value, probably because of a depletion of the tissue reserves.

If the foregoing pathological and abnormal physiological conditions are known, we are in a position to prepare this patient for the indicated treatment. In no other surgical condition is it more necessary to give the patient adequate preoperative preparation than in patients with toxic goiter. The length of the preoperative preparation and the measures used will depend, of course, upon the degree of toxicity. First, if these patients are manifesting any toxic symptoms, they must be put to bed with absolute quiet maintained at all times. They should practically be isolated. I wish particularly to condemn the radio in the sickroom of the goiter patient. These patients are especially responsive to psychic insults and almost any of the programs could produce excitement. It is our practice to give all toxic goiter patients Lugol's, minims 10, three times a day. If the patient is nauseated or approaching a thyroid crisis, we do not hesitate to give this much Lugol's intravenously in glucose solution. If given by mouth, it is better tolerated in a little milk. In order to produce sleep and lower the threshold for psychic stimuli, hypnotics or sedatives should be used freely.

We use some form of phenobarbital or luminal, the size and frequency of the dose being dependent upon the symptoms manifested.

These patients should be placed upon a diet high in carbohydrate and protein and free of fat. If the patient is nauseated or in a thyroid crisis, glucose and fluids are given by vein. When indicated, we do not hesitate to give as much as 5 or 6 liters of fluid with as much as 600 to 1,000 grams of glucose in a twenty-four hour period. The protein should, of course, be administered intravenously in such cases by transfusion or by the use of blood plasma.

Under this treatment the patient's condition usually improves to such an extent in from ten days to three weeks that the thyroidectomy may be done. However, after the patient has shown what is believed to be sufficient clinical improvement, as a further check I would urge that the hippuric acid function test be repeated and that at least as much as three grams be excreted in the four-hour period. Also, if the patient has had an elevated basal metabolic rate, it should be re-checked. If the rate is lowered, you have further proof of the patient's improvement and readiness for operation. Due to this preoperative treatment, less and less is it considered advisable to do step operations.

If the patient is an adult and has a goiter, it has been our practice since 1939 to do a total thyroidectomy. Since it is our belief that the glands are diffusely involved, we feel that the surgeon's knowledge of the presence of disease in the thyroid is sufficient to warrant a total thyroidectomy. Why leave a part of a diseased organ behind? The patient's burden may be somewhat easier to bear with the larger portion of the diseased organ removed, but he still will suffer the effect of the toxicity of the remaining portion of the gland left by a subtotal thyroidectomy. Since Kocher in 1882 reported a case of myxoedema following a total thyroidectomy in a 10-year-old boy, the horror of such an occurrence has been present in our minds. It is unfortunate that Kocher emphasized the dire result obtained in this child, but failed utterly to note that this mysterious condition follows total thyroidectomies in adults no more often than it follows subtotal thyroidectomies. Boothby and Plummer⁴ express the opinion that the incidence of myxoedema as a postoperative sequellae, at least to the exophthalmic or the acute goiter, apparently is roughly proportional to the incidence and degree of chronic thyroiditis. Pemberton stated that in about 10 per cent of all

cases of acute goiter the histological study shows a picture of round-cell infiltration and fibrosis in a degree sufficient to warrant a diagnosis of thyroiditis. He further stated that in at least one-half per cent the round-cell infiltration was very marked and that myxoedema invariably developed in these cases. Wilson and Mayo⁵ report that in some 15,000 subtotal thyroidectomies, postoperative myxoedema occurred in 1.2 per cent. It is true that it follows the acute goiter more often than the chronic, but it may follow either type. It is known that myxoedema may appear spontaneously, probably as the result of an unrecognized thyroiditis; and also that a postoperative myxoedema may spontaneously disappear.

It is true that the total removal of the thyroid gland is technically a little more difficult than subtotal thyroidectomy. One is more likely to injure the recurrent laryngeal nerve, particularly on the right, and one must be very careful not to remove one or more of the parathyroid glands or at least disturb their blood supply. Total thyroidectomy does demand a most adequate exposure. One must demonstrate the recurrent laryngeal nerve so as not to injure it. But, on the other hand, numerous cases have been reported of recurrent laryngeal nerve injury and tetany following the subtotal thyroidectomy. We have found that we have much better hemostasis following total thyroid removal and the closing of all wounds without drainage.

The postoperative treatment of the patient should be as carefully carried out as the preoperative preparation. It is our practice to put these patients to bed in a semi-sitting posture. They are given morphine sulphate, gr. $\frac{1}{4}$, p.r.n. Quite often, if the patient is unable to swallow, this is reinforced by the use of hyperdermics of sodium luminal. We give at least 3,000 c.c. of fluid in twenty-four hours which contains from 150 to 500 grams of glucose. Steam inhalations have been found beneficial in the treatment of the tracheitis that accompanies the trauma to the trachea incident to the operation. Liquids by mouth are given as soon as nausea ceases. The skin sutures are removed within seventy-two hours.

We did twenty-six total thyroidectomies in 1939 and 1940, and we have been able to follow-up twenty-four of these patients. Both chronic and acute cases of goiter are included in this series. A few exhibited no apparent signs of hyperthyroidism or toxemia. All of these patients postoperatively had basal metabolic rates of from minus 30 to minus 40; but in spite of

these low metabolic rates they exhibited no clinical or physical signs of hypothyroidism. Twenty-three still have readings of minus 20 or more. One, on whom it was thought total thyroidectomy had been done, had a recurrence of symptoms within a year. This patient, a white female, age 39, originally had a basal metabolic rate of plus 35 and had an acute goiter. Upon her return of symptoms, her basal metabolic rate was found to be plus 20. We were unable to palpate any thyroid tissue between the clavicles and the junction of the jaw and neck. Even X-ray of the substernal region failed to reveal any abnormal mass. As you know, aberrant thyroid tissue may exist anywhere from the base of the tongue to the arch of the aorta. Recently Lahey has particularly stressed the lateral location of aberrant thyroid tissue. Because of the inability to palpate any mass in the thyroid bed or adjacent region, this patient is now being given X-ray treatments for possible goiter in aberrant thyroid tissue. We have so far had no apparent recurrent laryngeal nerve injury. However, in the past in subtotal thyroidectomies we have had two temporary recurrent laryngeal nerve injuries. In this series of total thyroidectomies, we did experience two transient tetanies which responded in from six to twelve weeks treatment with parathyroid given hypodermically. In each instance the pathologist carefully searched the removed gland, but found no evidences of parathyroid bodies. It is therefore believed that the tetany was due not to the removal of any of the parathyroid bodies but to a disturbance of the blood supply to these structures which in the course of time re-established itself.

Conclusions

By way of summary I should like to list the points I have tried to bring out in this paper:

1. There is no such thing as an innocent goiter.
2. In the presence of goiter, the entire thyroid is involved in the abnormal process.
3. The pathologist and the clinician must harmonize their microscopic and clinical pictures if we are to treat these patients successfully, because the diagnosis of goiter ultimately rests upon clinical observation.
4. A negative basal metabolism rate does not eliminate an active disease process in the thyroid.
5. To treat these patients successfully, we must recognize certain pathological and physiological changes produced by goiter.
6. A very careful preoperative preparation is necessary.

7. We believe that total thyroidectomies in adults are always indicated because they leave no diseased tissue behind.

8. Myxoedema does not follow total thyroidectomies any more often than it follows sub-totals.

9. A very careful postoperative care of patient.

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THE NEW ORLEANS GRADUATE MEDICAL ASSEMBLY

The sixth annual meeting of The New Orleans Graduate Medical Assembly will be held March 2 through March 5.

In keeping with the established policy, eighteen guest speakers will be on the program, each one prominent in medical circles. The Section on Surgery will be represented by two guest speakers, Dr. Frank H. Lahey, President of the American Medical Association, and Col. Norman T. Kirk, Director of Surgery, Army Medical School, Army Medical Center, Washington, D. C. Dr. Lahey has selected as his topics "Lesions of the Terminal Ileum, Colon and Rectum," "Some of the Common and Uncommon Thyroid Problems" and "The Place of Medicine in the Country Today." Col. Kirk has chosen very important and timely subjects, namely, "Plan for Evacuation and Treatment of War Casualties," "The Guillotine or Open Amputation" and "The Medical Department Problems in the Present Emergency."

The Section on Medicine will also have two guest speakers, Dr. William H. Sebrell of Washington, D. C., and Dr. William B. Porter of Richmond, Virginia. His talks will be of utmost interest and are as follows: "Nutrition and National Defense," "The Clinical Importance of Vitamin B Complex Deficiencies" and "The Diagnosis of Subclinical Deficiency Disease." Dr. Porter, Professor of the Theory and Practice of Medicine, Medical College of Virginia will discuss "Acute Pericarditis," "Complications of Staphylococcal Cutaneous Infections," "The Diagnostic Significance of Changes in the Hands" and "The Clinical Syndrome Associated with Inter-capillary Glomerulosclerosis."

It would be impossible to enumerate here the names and subjects of all of the essayists but each speaker is among the country's foremost medical educators and their participation in the meeting will play an important part in its success. A complete list of the speakers, together with their specialties, is carried in an announcement in this issue of the journal.

It is hoped that many doctors will plan now to set aside a few days from their regular routine and attend the Assembly. The meeting offers an excellent opportunity to combine post-graduate work together with the establishment of good fellowship. The registration fee of ten dollars covers all features, including four daily round-table luncheons.

CONTRACEPTION TECHNIQUE AND MEDICAL INDICATIONS *

M. C. HAWKINS, JR., M. D.

Searcy

The problem of conception control is no longer a sociological one alone, but is becoming of increasing importance to the medical profession. This is as it should be, since too many strictly medical problems have been relegated to lay groups and various cultists in the past with an ultimate inestimable loss to the medical profession.

Among the numerous medical indications for conception control, I consider the following important:

- Cardiac Disease
- Tuberculosis
- Syphilis
- Gonorrhea
- Diabetes
- Renal Disease
- Exophthalmic Goitre
- General Debility and Anemia
- Hypertension
- Nervous and Mental Disorders
- Epilepsy
- Paralysis
- Feeble-mindedness
- Multiple Sclerosis
- Psychoses and Neuroses of various types
- Marital Maladjustment
- Uterine Displacements
- Uterine Tumors
- Marked Prolapse
- Adnexal Disease (Salpingitis)
- Marked Pelvic Lacerations
- Pelvic Deformities
- Post-operative (especially following operations on pelvic regions)
- Toxemias of Pregnancy
- Lactation period
- Spacing Children in Family
- Menopause

Having made a complete physical examination and decided that a wife is entitled to contraception control advice, the next question is just what method will best serve her, since each case is an individual case in itself.

For the newly-married bride who has not previously had intercourse, the condom and jelly is the most satisfactory and dependable because of its simplicity and general availability, and because a virgin cannot be easily fitted with a

* Presented, with lantern slides, before the Sixty-sixth Annual Session, Arkansas Medical Society, Little Rock, April 15, 1941.

diaphragm or cup. After marital relations have been established, and provided the wife has a normal vagina, the ordinary coil spring type or watch spring type of diaphragm with jelly is by far the most satisfactory device.

For the individual with a large cystocele, the duraflex or matrisalus diaphragm will, because of its shape, obliterate the cystocele and cover the cervix well. If the uterus be retroverted, the Findley or bow-bending diaphragm can be more easily placed, or the mizpah cervical cap can be fitted.

For the juvenile type of vagina, with a short inelastic anterior wall and anteflexed uterus, the cervical cap or condom with jelly should be advised.

A method which can be made inexpensively available to masses of population without the need for examination of the individual patient is the foam-sponge device, which is gaining in favor with the public health departments.

Next comes the fitting of the device if a diaphragm or cervical cap is to be prescribed. The patient is instructed to empty her bladder, and is placed on the table as for an ordinary vaginal examination. The doctor then examines with the speculum and bimanually, and determines the size required by measuring with the fitting rings, which vary in size from 50 to 105 (sizes 70 to 80 accommodate most persons). The desired diaphragm is placed in the vagina. The woman is instructed to examine the diaphragm in place, remove, and replace it, learning the feel of the covered cervix and of the upper rim of the diaphragm behind the pubic bone. She is next taught to place a teaspoonful of jelly in the concavity of the diaphragm, lubricate the edges and reinsert it by folding it between her thumb, first and second fingers with the concavity containing the jelly toward her. The lower rim is passed into the vagina and directed downward as far as possible, the fingers release the rim, allowing the diaphragm to open. The upper rim is then pushed up and behind the pubic bone with her middle finger. The patient is instructed not to remove the diaphragm under six hours after intercourse and, on removing it, to take a cleansing douche, one-half before and the other half after its removal. The diaphragm should be washed with warm soapy water, dried, powdered, and kept in a cool, dry place. In event a cap is to be used, the woman partially fills the cap with jelly, carries it into the vagina on her finger as though it were a thimble, turns it partly over and slips it onto the cervix, which she has been previously taught to recognize.

The foam-sponge is employed by first dampening the sponge with water, sprinkling the spermicidal powder on both sides, and gently squeezing until foam appears, after which it is inserted into the vagina as far as possible. Remove not sooner than six hours.

The following is a table of the Reported Effectiveness and Acceptability of Contraceptive Methods as found among the variety of patients usually seen at birth control clinics:

Methods	Effectiveness (Per Cent Reliability)	Acceptability (Per Cent Using)
Pessary jelly	90 (85-95)	50 after 2 yrs., 30 to 70 after 2 yrs., 25 after 6 yrs.
Condom, preclinic	70-90	Unknown
Condom, postclinic	85-95	Unknown
Withdrawal, preclinic	35-70	Unknown
Withdrawal, postclinic	50-80	Unknown
Jelly alone	80 (70-90)	25 after 1 yr., 15 after 2 yrs., 50 after 1 yr., 63 after 1 yr., 55 after 2 yrs.
Foam-sponge	85 (55-95)	After 6 months, 49, 51, 63, 71, 76, 83
Douche	16-70	Unknown

TIRE RATIONING

To the medical profession there is presented an additional responsibility in the conservation of rubber by the action of the Office of Price Administration which has held that the medical profession is exclusively entitled to passenger car tires. Every physician should familiarize himself with the tire regulations because the tire situation is so desperate that even being a physician and surgeon is no guarantee that a new tire can be obtained. The regulations specify: "No certificate shall be issued unless the applicant for the certificate certifies that the tire, casing, or tube for which application is made is to be mounted: (a) On a vehicle which is operated by a physician, surgeon, visiting nurse, or a veterinary and which is used principally for professional services." No certificate will be issued unless it is shown that the vehicle upon which the tire is to be used actually and principally used for making professional calls. Tire rationing boards over the country are adding an interpretation which will deny the physician, unless urgent need is shown, a spare tire. There is no permitted deviation from the regulations and no appeal from the decision of the tire rationing boards.

There rests upon the medical profession an obligation to see that the provisions of the tire rationing program are properly met. The further obligation exists that physicians, in the interests of national unity, confine their motor travel to professional business.

WORKMEN'S COMPENSATION AS RELATED TO PHYSICIANS

HON. PETER A. DEISCH

Helena

The Arkansas Workmen's Compensation Law requires employers to pay fixed compensation to every employee injured as a result of employment. Prior to the enactment of this law, the employer was only required to respond in damages to those who were injured as a result of the negligence of the employer. Court remedy, in the absence of such legislation, has been slow, costly and uncertain. The late Dr. Hinkle regarded the lack of such a law as one of the great evils of our time because of the dilatory ways of our courts. Under the compensation law the question of fault or blame for the accident is not raised, since the cost of work injuries is considered part of the expense of production. All that is necessary to entitle an injured workman to benefits is the occurrence of an injury which arises out of, and in the course of employment. For purposes of compensation, an injury includes an occupational disease or infection.

In order to provide prompt payment of those obligations, the law requires every employer to provide compensation insurance, the latter being designated as the "carrier." As in all other forms of insurance, it is highly desirable for the carrier to have proper experience statistics so that it may be able to provide and set aside necessary reserves.

Rates charged for the insurance are fixed for each particular business, for instance, there is a certain rate for a particular kind of mercantile establishment, for a sawmill, for a coal mine, or for a clinic. The rate is based on the payroll, being a certain percentage of the amount paid to workers each week.

These rates will be raised or lowered in the future according to the experience that the carrier has with the type of employment. The award is made as soon after the injury as it may be determined how long the disability will continue, and it is payable over a period of weeks. It is therefore necessary for a prognosis to be made as soon as may be after the injury so that the Commission may fix the award. All three parties concerned, employee, employer and carrier, are therefore interested in good treatment for the patient, and in accurate, complete and prompt reports from the attending physician.

There are three parties, therefore, especially interested; the employer, the employee (the pa-

tient), and the carrier, and the physician owes exactly the same duty toward each of them. He should avoid taking the position that as his payment is received from one of those three, he owes any greater or higher duty to that one, than to either of the others. In other words, his findings should not, in any way, reflect any favoritism or prejudice.

Reports: The chief fault that could be found on the part of physicians, so far as our act has been in effect, are: (1) Delay in reports, (2) lack of detail, and (3) lack of positiveness. The award cannot be made until the carrier has something definite on which to base his compensation. He represents the employer, who is anxious that the damages of the employee be redressed as speedily as may be, and that the matter be disposed of so that his liability may be terminated. The employee is, of course, anxious for a determination to be made and his payments to commence, and none of the bills can be paid to any one until a complete report is received. Delay in reporting has been one of the principal faults of the physician.

Lack of Detail in Reports: Details should be noted in the report, and if complications arise, the carrier should be advised at once. The carrier should have a good picture of the case in his files, and if he has those details, there will be few arguments over bills. If the carrier is not kept aware of the unusual or unexpected developments, the carrier could not feel justified in paying a large bill, if such a bill becomes necessary. The doctor should do his share and usually he will find the carrier cooperative and helpful.

Lack of Positiveness of Findings: Of course, the doctor cannot be completely definite as to the duration of disability, but he should do the best he can do under the circumstances. His best opinion, arrived at after adequate study and observation of the situation, is all that is required.

In many cases it is not possible to start or continue money payments to injured workers until medical reports have been received.

It has been estimated that twenty cents out of every dollar of compensation is paid to physicians and hospitals, and as they share so largely in the benefits of the system they have corresponding responsibilities. One of these responsibilities is to make such report as will enable the Commission to arrive at a proper award. The satisfactory operation of the system depends largely on the cooperation of the physicians.

What are Personal Injuries: Under the law a "personal injury" may be any one of the following:

(1) An accidental injury "arising out of and in the course of employment."

(2) An occupational disease or occupational infection naturally and unavoidably resulting from such an accidental injury. Some of the occupational diseases, recognized by the act, are listed in the Workmen's Compensation article which appeared in the Journal of January, 1941, Vol. XXXVII, No. 8.

(3) An occupational disease or occupational infection which arises naturally out of the employment. The actual diseases for which compensation is payable are listed in the act and other diseases are not compensable.

The amount of compensation which an injured employee receives for his injury depends in part upon the classification of his disability. The compensation law breaks down disabilities into four types: (1) permanent total, (2) temporary total, (3) permanent partial, and (4) temporary partial.

In the case of total disability, both permanent and temporary, the injured worker receives an amount equal to 65% of his average weekly wages for the duration of the disability, subject to certain limits set up in the law. The "average weekly wage" is computed according to a formula also set forth in the law.

In the case of partial disability, the method of computing benefits differs. There are two types of permanent partial disabilities, "schedule" and "non-schedule." The "schedule" disabilities are those which involve the loss of a member, such as an arm, leg or hand, or of a bodily function, such as sight or hearing. In those cases payment is based upon 65% of the average weekly wage for a definite period of weeks set forth in the act. The loss of an arm is scheduled at 200 weeks; the loss of a hand at fewer weeks, and so on.

"Non-schedule" permanent partial and temporary partial disabilities are compensable at the rate of 65% of the difference between the employee's average weekly wages before the injury and his "wage earning capacity" after the injury. In case of partial, as in total, disabilities, the amount which an injured employee may receive is limited by the law.

Injuries to parts of the body such as a kidney, the spine, the skull, the nervous system, etc., are "non-schedule," but are evaluated in terms of total or partial-total disability.

"Other Cases: In all other cases in this class of disability there shall be paid to the injured employee 65% of the difference between his

average weekly wages and his wage earning capacity thereafter in the same employment or otherwise, payable during the continuance of such partial disability, but subject to reconsideration of the degree of such impairment by the Commission * * and in no case exceeding a longer period than 450 weeks, or a maximum of \$7,000."

The difficulty that doctors encounter is not in reference to the clear-cut cases of schedule loss. It is only, when function is affected that the matter of individual evaluation comes into play. This phase of the work calls for individual experience, usually based on experience in similar cases. It entails a good bit of thought on the part of the doctor, and the aptitude of the doctor in this respect is only as good as the time and effort he is willing to devote to the work.

In all cases the injured worker is entitled to all necessary medical, surgical and hospital service, apparatus and medical supplies, during 60 days after the injury, and for such longer time as in the judgment of the Commission may be required.

As the law does not concern itself with the work that the man might have been performing at the time he was hurt, but thinks of the person as an average normal unit, the doctor should compare the injured person as he now is in his injured state, with the average normal person.

Hernia: Before there can be compensation for hernia, it must be shown to the satisfaction of the Commission:

(1) That the descent of the hernia immediately followed as the result of sudden effort, severe strain, or the application of force directly to the abdominal wall.

(2) That there was severe pain in the hernial region.

(3) That such prostration resulted so that the employee was compelled to cease work immediately.

(4) That the occurrence of the hernia was noticed by the claimant and communicated to the employer within 48 hours after.

(5) That the physical distress following the occurrence of the hernia was such as to require the attendance of a licensed physician within 48 hours after such occurrence.

In every case of hernia as above defined, it shall be the duty of the employer forthwith to provide the necessary and proper medical, surgical and hospital care to effectuate a cure by radical operation, not exceeding, however, the sum of \$250, and to pay compensation, not exceeding a period of 26 weeks.

In case the employee shall refuse to permit such operation, it shall be the duty of the employer to provide all necessary first aid, medical and hospital care and services, and to supply the proper and necessary truss or other mechanical appliance to enable said employee to resume work, not exceeding \$250, and shall further pay compensation not exceeding the period of 13 weeks.

Medical care should be furnished by the employer. In practice, however, this is often done by the insurance carrier. If the employer neglects this duty, the employee may obtain emergency treatment by a physician of his own choice at the expense of the employer and may apply to the Commission for authority to obtain further treatment.

The injured worker is required to submit to a physical examination by a duly qualified physician designated or approved by the Commission.

All states, save Mississippi, have Workmen's Compensation Laws, and if we will all devote our best efforts toward making ours successful, it will prove of benefit to our state. If the medical profession is continuously and thoroughly conscious of its responsibilities and opportunities, if to its undisputed monopoly of the scientific knowledge of medical diagnosis and treatment, it adds a thorough knowledge of the best economic and social methods of applying that knowledge to the situations that arise under competition, the public and the employers will be willing to listen, and even to follow, the counsel of organized medicine.

LOCAL DOCTOR HAS WAY TO END WAR

Since Adam partook of the forbidden fruit in the Garden of Eden, man has remained the same, with approximately 200 bones, 400 muscles, 8 or 10 gallons of water and enough iron to make one six-penny nail. Now, if all the red blood cells that are in a normal man were the size of a grape fruit and rounded up in a heap, we would have a mountain four times as high as Pikes Peak, then if we could grow a man to carry these in his blood vessels in proportion as in an average man, he would be 1,500 miles high: he would be so big we could get about three of them in the state of Texas.

It would take the entire 1941 cotton crop to make him a pair of pants—he could take a few strides out in the middle of the Atlantic Ocean which would be less than ankle deep, and pick up the largest steam ship afloat between his thumb and fingers, and toss it over in the Pacific Ocean, and if the guns and cannons that are used in the European war today were molded into one gun he could carry it in his hip pocket. Now, if we could grow a giant like this, then give him a fly swatter 500 miles square, we could end this war in thirty minutes.

E. BAKER, M. D.

—Dermott News, October 30, 1941.

RECOMMENDATIONS TO ALL PHYSICIANS WITH REFERENCE TO THE NATIONAL EMERGENCY

I. Medical Students

A. All students holding letters of acceptance from the Dean for admission to medical colleges and freshmen and sophomores of good academic standing in medical colleges should present letters or have letters presented for them by their deans to their local boards of the Selective Service System. This step is necessary in order to be considered for deferment in Class II-A as a medical student. If local boards classify such students in Class I-A, they should immediately notify their deans and if necessary exercise their rights of appeal to the Board of Appeals. If, after exhausting such rights of appeal, further consideration is necessary, request for further appeal may be made to the State Director and if necessary to the National Director of the Selective Service System. These officers have the power to take appeals to the President.

B. Those junior and senior students who are disqualified physically for commissions are to be recommended for deferment to local boards by their deans. These students should enroll with the Procurement and Assignment Service for other assignment.

C. All junior and senior students in good standing in medical schools, who have not done so, should apply immediately for commission in the Army or the Navy. This commission is in the grade of Second Lieutenant, Medical Administrative Corps of the Army of the United States, or Ensign H.V. (P) of the United States Navy Reserve, the choice as to Army or Navy being entirely voluntary. Applications for commission in the Army should be made to the Corps Area Surgeon of the Corps Area in which the applicant resides and applications for commission in the Navy should be made to the Commandant of the Naval District in which the applicant resides. Medical R.O.T.C. students should continue as before with a view of obtaining commissions as First Lieutenants, Medical Corps, upon graduation. Students who hold commissions, while the commissions are in force, come under the jurisdiction of the Army and Navy authorities and are not subject to induction under the Selective Service Act. The Army and Navy authorities will defer calling these officers to active duty until they have completed their medical education and at least 12 months of internship.

II. Recent Graduates

Upon successful completion of the medical college course, every individual holding commission as a Second Lieutenant, Medical Administrative Corps, Army of the United States, should make immediate application to the Adjutant General, United States Army, Washington, D. C., for appointment as First Lieutenant, Medical Corps, Army of the United States. Every individual holding commission as Ensign H.V. (P), U. S. Navy Reserve, should make immediate application to the Commandant of his Naval District for commission as Lieutenant (J.G.) Medical Corps Reserve, U. S. Navy. If appointment is desired in the grade of Lieutenant, (J.G.) in the regular Medical Corps of the U. S. Navy, application should be made to the Bureau of Medicine and Surgery, Navy Department, Washington, D. C.

III. Twelve Months Internes

All internes should apply for a commission as First Lieutenant, Medical Corps, Army of the United States, or as Lieutenant (J.G.), United States Navy or Navy Reserve. Upon completion of 12 months internship, except in rare instances where the necessity of continuation as a member of the staff or as a resident can be defended by the institution, all who are physically fit may be required to enter military service. Those commissioned may then expect to enter military service in their professional capacity as medical officers; those who failed to apply for commission are liable for military service under the Selective Service Acts.

IV. Hospital Staff Members

Internes with more than 12 months of internship, assistant residents, fellows, residents, junior staff members, and staff members under the age of 45, fall within the provisions of the Selective Service Acts which provide that all men between the ages of 20 and 45 are liable for military service. All such men holding Army commissions are subject to call at any time and only **temporary deferment** is possible, upon approval of the application made by the institution to the Adjutant General of the United States Army certifying that the individual is temporarily indispensable. All such men holding Naval Reserve commissions are subject to call at any time at the discretion of the Secretary of the Navy. Temporary deferments may be granted only upon approval of applications made to the Surgeon General of the Navy.

All men in this category who do not hold commissions should enroll with the Procurement and

Assignment Service. The Procurement and Assignment Service under the Executive Order of the President is charged with the proper distribution of medical personnel for military, governmental, industrial, and civil agencies of the entire country. All those so enrolled whose services have not been established as essential in their present capacities will be certified as available to the Army, Navy, governmental, industrial, or civil agencies requiring their services for the duration of the war.

V. All Physicians Under Forty-five

All male physicians in this category are liable for military service and those who do not hold commissions are subject to induction under the Selective Service Acts. In order that their service may be utilized in a professional capacity as medical officers, they should be made available for service when needed. Wherever possible, their present positions in civil life should be filled or provisions made for filling their positions, by those who are (a) over 45, (b) physicians under 45 who are physically disqualified for military service, (c) women physicians, and (d) instructors and those engaged in research who do not possess an M.D. degree whose utilization would make available a physician for military service.

Every physician in this age group will be asked to enroll at an early date with the Procurement and Assignment Service. He will be certified for a position commensurate with his professional training and experience as requisitions are placed with the Procurement and Assignment Service by military, governmental, industrial or civil agencies requiring the assistance of those who must be dislocated for the duration of the national emergency.

VI. All Physicians Over Forty-five

All physicians over 45 will be asked to enroll with the Procurement and Assignment Service at an early date. Those who are essential in their present capacities will be retained and those who are available for assignment to military, governmental, industrial or civil agencies may be asked by the Procurement and Assignment Service to serve those Agencies.

The maximal age for original appointment in the Army of the United States is 55. The maximal age for original appointment in the Naval Reserve is 50 years of age.

All inquiries concerning The Procurement and Assignment Service should be sent to The Executive Officer, 5654 Social Security Building, 4th and Independence Avenues, SW, Washington, D. C., and not to individual members of the Directing Board or of committees thereof.

HISTORY OF THE ARKANSAS MEDICAL SOCIETY

Compiled by the Committee

Frank Vinsonhaler, Chairman, Little Rock; M. L. Norwood, Lockesburg; E. F. Ellis, Fayetteville; Robert Caldwell, Little Rock; W. T. Wootton, Hot Springs National Park; H. Moulton, Fort Smith; J. M. Lemons, Pine Bluff; E. E. Barlow, Dermott; D. A. Rhinehart, Little Rock; W. H. Mock, Prairie Grove; L. J. Kosminsky, Texarkana; F. O. Mahony, El Dorado; M. E. McCaskill, Little Rock; Geo. B. Fletcher, Hot Springs National Park; O. J. T. Johnston, Batesville; S. J. Wolferrmann, Fort Smith; A. S. Buchanan, and H. T. Smith, McGehee.

HISTORY OF SEBASTIAN COUNTY MEDICAL SOCIETY FROM 1874 to 1942

D. W. GOLDSTEIN, M. D.
Fort Smith

The first medical society in Arkansas was formed by James A. Dibrell and the Army surgeons of Fort Smith about 1845. Following it other counties tried to organize medical societies but these were not of long life.

The records we have of our society begin with 1874 when the Sebastian County Medical Society was formed. No reference is made to the old society. The organization meeting was held at Greenwood, the county seat. The following men were present: F. M. Molton, J. W. Breedlove, J. M. Sorrels, Thos. Davenport, W. F. Blakemore, J. E. Bennett, E. T. Walker, W. H. Bailey, W. W. Bailey, and J. H. T. Main.

Its chief objects were to enable its members to keep pace with the progressive spirit of the age in which we live; to promote peace and concord among ourselves, and to engender a love of science. The code of ethics of the American Medical Association was adopted. The medical profession has for its prime object the service it can render to humanity.

J. G. Eberle joined the society later in 1874.

The State Society was formed in 1875 at Little Rock. Albert Dunlop, Fort Smith, was elected vice-president; J. G. Eberle, Fort Smith, assistant secretary.

It was my pleasure a number of years ago to hear Doctor Eberle speaking at an annual banquet describe his trip to Little Rock. He drove half the way in a buggy.

The scientific programs were always arranged. Numerous cases were presented and discussed.

EDITORIAL NOTE: This is the tenth installment of the preliminary draft of a History of the Arkansas Medical Society. Subsequent issues will contain additional sections of the history as now prepared. The Committee will welcome suggestions or additions which the membership shall care to present.

The first case shown before the case of elephantiasis (Bucanemia Tr. F. Blakemore. Another interesting case of hydrophobia by Doctor Eberle in . The patient lived five days. It was suggested that larger doses of anodynes and hypnotics be given. The first autopsy was by Doctor Duval in 1874, cancer of the bowel in a child. In 1875 chronic chills was a discussion. In 1879 the therapeutic action of aconite was discussed by Doctor Bennett.

In 1880 unprofessional conduct was charged against a member. He was called to attend an obstetrical case but refused to give up the case until after delivery, although the doctor who had been engaged later arrived.

1882. A gunshot wound of the tibia was reported. The bone was comminuted, arteries being intact. Conservative methods were used. Patient reported satisfactory progress after six weeks.

1883. Fee list adopted. Ordinary visit \$2; after 10 p.m. \$4; office consultation \$1 to \$4; physical examination \$3 to \$5; consultation city, \$10; mileage, day \$1, night \$2; gonorrhea first prescription \$4; syphilis \$10 (in advance); strangulated hernia \$50-\$100; fistula in ano \$150; harelip \$25-\$100; hemorrhoids obstetrics \$15-\$30. Cases requiring more than 6 hours \$30-\$50; expert to Justice of Peace court \$10-\$15; United Court \$25-\$100.

1888. J. D. Southard reported a reclusus. The first discussion of hernia was by Doctor Hatchett. He attempted McBurney's operation, but gave it up as impracticable.

1890. Dr. Southard presented the name H. Moulton for membership. He was unanimously elected. Ligation of common carotid + orbital aneurysm was reported by Doctor B.

1894. Contract practice was first mentioned although there had been much discussion of tortors using cards and frequent names in papers.

In 1905 a Committee on Contract Practice was appointed.

1907. Dr. W. R. Brooksher, Sr., discussed the use of X-Ray in treating epithelioma. Five cured cases were presented. He saw great future for the X-Ray.

The first hospital was organized in Fort Smith in 1887 by Rev. George F. Degen, Rector of St. John's Episcopal Church. In 1896 another hospital was formed called Charity Hospital. Both hospitals operated separately until 1899, when they were consolidated under the name of "Beile Point Hospital." In 1902 a new building was

The present location of Sparks Memorial Hospital. In 1908 Mr. George T. Sparks died and bequeathed \$25,000 to Belle Point Hospital. Its name was changed to Sparks Memorial Hospital. This hospital had as its directors members of Sebastian County Medical Society who were elected by the Society. It continued to operate under the control of the Society until 1934, when because of the depression and severe financial difficulties of the hospital, Chas. S. Holt offered to continue the operation on the same plan, and has since efficiently administered the institution.

Under his capable management the hospital has grown. This in no way has affected the policy of the institution. It is open to all members of Sebastian County Medical Society.

Fort Smith has one other ethical hospital, Saint Edwards Mercy Hospital organized in 1905. Both hospitals are standardized.

The Twin City Hospital for negroes has been in existence for several years. It moved into a new building on January 12, 1942.

Some of the early papers by present members were:

1901. J. M. Taylor, "Appendicitis." Showed slides.

1902. "Tonsils and What to do with Them" by H. S. Fekley.

1903. St. Cloud Cooper reported the successful treatment of tic douloureux by alcohol.

1904. Also demonstrated injection of the gas-ganglion.

1904A. Foltz, Egg nog as a diet in fever.

1905. Treatment of alcoholism.

1906. F. Hoge, Amebic Dysentery.

1907. M. E. Foster, Salvarsan in Syphilis and Chancres.

1908. C. King, Fracture of arm treated by Lane's method.

1909. First discussion of fee splitting.

1910. Motor shown before Society.

1911. Thos. Wilson. "Gonorrhea."

1912. S. J. Wolfermann. "Incipient Tuberculosis."

1916. D. W. Goldstein discussed radium.

1917. WORLD WAR No. 1. A hectic year.

Walter Eberle was president of the Society; S. J. Wolfermann, secretary. They did not serve the full term. E. C. Moulton acted as secretary until called into service early in 1918. There were 52 members in Sebastian County Medical Society. 14 members served in World War No. 1. Out of the 52 members of this Society in 1917 there are 23 members now living. The oldest member is Herbert Moulton.

Members of the Society who were members in 1917 and who served in the Medical Corps were:

C. S. Bungart, Dred Dorente, W. G. Eberle, M. E. Foster, Bunn Harris, A. F. Hoge, D. W. Goldstein, J. E. Johnson, E. L. Lindsey (deceased), E. C. Moulton, R. F. Parks (deceased), P. A. Riddler (deceased), C. P. Wilson (deceased), and S. J. Wolfermann.

Present members who served were:

A. A. Blair, W. R. Brooksher, H. C. Dorsey, I. F. Jones, and J. S. Southard.

Members remaining at home also contributed their part in helping win the war.

1918 was influenza year and the few doctors remaining had other things to do than to attend meetings. When they did meet war and "Spanish-flu" were the discussion.

1920. Glucose used ("Sweetness" injected into the veins of one of our members who had an infection of the hand).

1925. Auxiliary formed.

1926. Insulin—A. A. Blair.

1927. Cholecystography—W. R. Brooksher, Jr.

1928. To be remembered as the year of formation of the first organization for contract practice. The doctors participating were not members of the Sebastian County Medical Society.

1929. E. H. and J. E. Stevenson became members of the Society. E. H. Stevenson should be remembered as one of the most active members in contributing to the passage of the Basic Science law. He brought all schools of medicine together. Without his support it is doubtful that the law would have been passed.

1931. Dues of the Society increased from \$5 to \$7.50.

J. S. Southard read a paper on Undulant Fever.

1933. It was decided that a sign be posted in offices of all members stating their membership in the Sebastian County Medical Society.

1934. Dr. W. R. Brooksher was elected secretary of the Arkansas Medical Society by the Council to fill the vacancy caused by the death of W. R. Bathurst, who had filled the office for 19 years.

1934. Endorsement of the 8-hour day for nurses.

1935. Numerous discussions were held on Government relief and medical care for indigents. Reorganization of hospital for negroes was proposed and Thos. P. Foltz and A. F. Hoge

were recommended to serve on this board. The Arkansas Medical Society met in Fort Smith. The state society had previously met in Fort Smith in 1896, 1911 and 1930.

1936. First discussion of group hospitalization, presented by Raymond T. Smith. Endorsement of plan of birth registration. All members were asked to cooperate in the immediate filing of birth certificates.

1937. Discussion of Protamine Insulin by A. A. Blair.

Discussion on Prontosil by F. H. Krock, reporting a case of streptococcus infection successfully treated. Treatment of skin infections by X-Ray, W. R. Brooksher. Arrangements made for radio talks on a health project. Time was given by KFPW (Goldman Hotel station). These programs have been continued. I. F. Jones, as chairman of the committee, has contributed much to these programs.

1939. We were honored by a visit from the Editor of The Journal of the American Medical Association, Morris Fishbein, who gave a public address.

A banquet was given honoring the President of the Arkansas Medical Society, S. J. Wolfermann, one of our members, who had contributed much to the State Medical Society as a member of the Council for 10 years previous to his election as President. Doctor Wolfermann had been a member of Sebastian County Medical Society for the past 26 years.

Presidents of the Arkansas Medical Society from Sebastian have been:

J. G. Eberle, 1897-98.

St. Cloud Cooper, 1914-15.

H. Moulton, 1924-25.

S. J. Wolfermann, 1938-1939.

1940. Annual session, Arkansas Medical Society.

Organization of group hospitalization under the insurance plan was accepted. Members from Sebastian County Medical Society were elected to the board.

1941. Due to non-support by the public, group hospitalization was withdrawn by the insurance company. S. J. Wolfermann reported on the use of sulfanilamide in compound fractures and Fred H. Krock reported a case of protruded intervertebral disc with recovery after surgical removal.

I purposely left out mentioning the work of one of the oldest members of our Society, H. Moulton, who has been a member since 1890 and who has done his part to help steer this medical society for the past 51 years. He was

president in 1898, and as state president, in his inaugural address said: "No standard of honor is too high, no code of ethics too fine, for a medical society." His first paper in 1890 was "Glaucoma" followed by "Traumatic Injuries of the Eye," "Laryngeal Phthisis," "Mastoiditis," "Sympathetic Ophthalmia," "Vertigo," and many others.

The writer has been a member of Sebastian County Medical Society for twenty-nine years and has seen this Society consider problems of fee-splitting, contract practice, government aid to the indigent, group hospitalization, World War No. 1 and now World War No. 2. Sebastian County has carried out the wish of its founders for high ethical standards.

As the pioneers of this Society by their adherence to the highest standard of ethics and interest in science have made our road easier, so let us pave the road for those to follow.

History taken from Records. Kept from organization meeting, 1874 to the present.

WHAT EVERY WOMAN DOESN'T KNOW—HOW TO GIVE COD LIVER OIL

What Every Woman Doesn't Know is that psychology is more important than flavoring in persuading children to take cod liver oil. Some mothers fail to realize, so great is their own distaste for cod liver oil, that most babies will not only take the oil if properly given, but will actually enjoy it. Proof of this is seen in orphanages and pediatric hospitals where cod liver oil is administered as a food in a matter of fact manner, with the result that refusals are rarely encountered.

The mother who wrinkles her nose and "makes a face" of disgust as she measures out cod liver oil is almost certain to set the pattern for similar behavior on the part of her baby.

Most babies can be taught to take the pure oil if, as Eliot points out, the mother looks on it with favor and no unpleasant associations are attached to it. If the mother herself takes some of the oil, the child is further encouraged.

The dose of cod liver oil may be followed by orange juice, but if administered at an early age, usually no vehicle is required. The oil should not be mixed with the milk or the cereal feeding unless allowance is made for the oil which clings to the bottle or the bowl.

On account of its higher potency in Vitamins A and D, Mead's Cod Liver Oil Fortified With Percomorph Liver Oil may be given in one-third the ordinary cod liver oil dosage, and is particularly desirable in cases of fat intolerance.

COMING MEDICAL MEETINGS

Mid-South Post Graduate Assembly, Memphis, February 10th-13th.

New Orleans Graduate Medical Assembly, New Orleans, March 2nd-5th.

Arkansas Medical Society, Hot Springs National Park, April 27th-29th, 1942.

American Medical Association, Atlantic City, June 8th-12th, 1942.

TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

THE number of persons whose pulmonary tuberculosis has been arrested through the aid of thoracoplasty is steadily increasing. They will require medical surveillance for the rest of their lives. They are not immune to other diseases. Since any doctor may be called on for advice, it is desirable that all members of the profession be familiar with the changes in the thorax which are brought about by thoracoplasty.

RESULTS OF THORACOPLASTY

In advanced tuberculosis disease, tissue destruction and cavity formation have taken place, the elasticity of adjacent segments of the lung is frequently reduced and the volume of the healthy lung is so reduced that it is incapable of filling the unyielding thoracic space. How can healing take place under such conditions?

Pulmonary cavities must be closed and remain closed. Fibrous tissue must not tear under the strain of ordinary thoracic movement, to insure against reactivation or hemorrhage. The scar must be solid, but at the same time its contraction should not pull thoracic viscera out of position to the extent that cardiorespiratory function is impaired. Certain patients are fortunate enough to make these adjustments spontaneously, arrest the process and enjoy moderate activity without reactivation. For a second group the problem has been solved by an adequate pneumothorax (or other temporary measure) which is maintained indefinitely with safety. There is a third group to which thoracoplasty is not applicable; patients who have such extensive disease and so distributed as to make it technically impossible to bring it wholly under control by any single method or combination of methods, must be excluded from this discussion.

A significant proportion of the tuberculous sick will not fall in the foregoing categories. The health of patients in this fourth group can be restored with surgical help. They are those patients who suffer from advanced disease with irreparable pulmonary damage.

A discrepancy exists between the volume of healthy lung and the volume of the thorax. Temporary measures have failed or present no reasonable chance of being effective. They have an equivalent of two healthy pulmonary lobes,

the two on one side or one on each side. Preferably, the disease is stable. The thoracic cage can be refashioned and the diseased lung released from its anchorages. The permanently altered position of the chest wall will provide a permanent collapse.

Modern thoracoplasty will accomplish the following:

1. Fibrous tissue is released, permitting cavity closure.
2. Pulmonary tissue which has been partially damaged but not totally destroyed, whose elasticity has been impaired by fibrosis, is relaxed.
3. Limitation of motion is imposed on the diseased lung.
4. The collapse of the disease can be made highly selective with conservation of healthy portions of the lung.
5. Disturbances due to distortion of the thoracic viscera such as upward displacement of the lower lobe and lateral displacement of the heart and great vessels, are corrected.

All of these readjustments are common accomplishments of a free pleura pneumothorax and thoracoplasty. In addition to these considerations, there are added benefits which are unique for thoracoplasty:

6. Thoracoplasty adjusts the thoracic volume so that it comes to equal the volume of the healthy lung. In other words, the functionless portion of lung is placed under permanent control.
7. The risk of tuberculous or mixed empyema developing in an artificially maintained air space is eliminated.

8. The risk of spontaneous pneumothorax on the side of treatment is greatly lessened.

The ultimate fate of patients treated by thoracoplasty cannot be determined until more time has elapsed. However, a preliminary study made of patients treated successfully by thoracoplasty and discharged with the consent of their medical advisers, is most encouraging. Of 107 patients discharged five or more years, 94.4% are living; 2.8% died of tuberculosis and 2.8% died of other causes. Of 315 patients discharged under five years, 97.8% are living; 0.3% died of tuberculosis and 1.9% died of other causes.

While exactly comparable end results are impossible to find, it is fair to assume that the severity and extent of the process from which the groups under discussion suffered, were more threatening than those of the average patient undergoing sanatorium treatment. Yet, they seem to fare better, for a study of 6,906 patients discharged alive from various sanatoria in this country revealed that only 60% of those discharged with consent were living after a period of five years.

In support of the belief that permanent collapse increases the chances for lasting results, the author quotes Roberts from the Brompton Hospital Reports for 1936 as follows: "It is shown that the chance of surviving five years in B 3 cases (not defined in the article) treated without collapse was 23.7%; with pneumothorax, 55.3%; and with thoracoplasty, 66.6%. Thus, the expectation of living five years is approximately three times as great in cases submitted to thoracoplasty as in the average B 3 case."

A questionnaire sent to patients treated by thoracoplasty and who had been discharged with consent, brought 293 replies. The great majority considered themselves well and were glad they had had a thoracoplasty; 83% were able to work; 70% declared they had no limitation of arm or shoulder motion. Many letters which accompanied the questionnaire replies stated that the scar and changes in contour of the chest constituted a small price to pay for restoration of health and many stated that their only regret was that the operation had not been performed sooner.

Several refinements of thoracoplasty have been made since de Cereville performed the first thoracoplasty in 1885. These include lung palpation at operation, specific mobilization and the liberation of anchoring structures over areas of disease, preservation, of periosteal elements and

subtotal scapulectomy to minimize deformity in partial thoracoplasty.

(The article is well illustrated with photographs, radiographs and diagrams.)

Permanent Collapse Therapy in Pulmonary Tuberculosis, Richard H. Overholt, M. D., Jour. of Amer. Med. Assn., November 15, 1941.

CORRESPONDENCE

HEADQUARTERS ARKANSAS DISTRICT CIVILIAN CONSERVATION CORPS

Office of the District Physician

Little Rock, Arkansas,
January 3, 1942.

To the Editor:

From time to time this office receives from civilian physicians and civilian hospitals, requests for payment for their professional services rendered to CCC enrollees who incur injuries or illness while on leave from their respective camps; and in certain instances payment from government funds is prohibited by existing CCC regulations, although, the physician's services were rendered in good faith. In such cases the physicians must look to the patient or the patient's parents for reimbursement. In view of this fact it is deemed advisable that physicians be familiarized through the medium of the Journal with the conditions governing whether or not the physician or hospital may expect to be reimbursed from CCC funds. The conditions are as follows: If the enrollee becomes sick or injured while on a leave of absence **originally granted for a period in excess of twenty-four (24) hours** the government will **not** assume liability for the payment of any civilian medical or hospital expense incurred. On the other hand, if the illness or injury is incurred while the enrollee is on leave of absence originally granted for a period of twenty-four (24) hours or less the government may assume liability for civilian medical or hospital attendance.

Should you see fit to assign space in the Journal to the foregoing statement it is believed that a better understanding among the members of the Society will prevail concerning their attendance to CCC enrollees on a leave of absence status.

Very truly yours,

JAMES M. NISBETT,
CCC District Physician.

THE JOURNAL

OF THE

ARKANSAS MEDICAL SOCIETY

Owned by the Arkansas Medical Society and Published
under direction of the Council

W. R. BROOKSHER, M. D., Editor
610 First National Bank Bldg. Fort Smith, Arkansas

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NEWS—Our readers are requested to send in items of news, also marked copies of newspapers containing matter of interest to the membership.

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EDITORIAL

ENROLMENT FOR SERVICE IN THE ARMY
AND NAVY

Last month The Journal published an urgent request to all physicians of the United States to fill out the questionnaire published in that issue and mail it at once to Dr. Sam F. Seeley, Executive Officer of the Procurement and Assignment Service, Washington, D. C., indicating their availability to serve the nation in the present emergency. The response to this call to the medical profession to date has been highly gratifying. The following statement to that effect, with additional instructions, has been received from the Directing Board of the Procurement and Assignment Service:

The response of the physicians of the country to the Procurement and Assignment Service request for enrolment of those now ready for immediate service in the army or the navy is highly gratifying. All names are being processed, and those who meet the present demands of the Surgeon Generals will receive application forms and authority to appear for physical examination at an early date. All who are now ready for immediate duty should forward applications to the Procurement and Assignment Service at once.

It is not the intention of the Procurement and Assignment Service to register every physician, dentist and veterinarian at the present time. Only those available for immediate assignments should register at this time. The physical requirements of all military, governmental, industrial and civil agencies will be published in national and state journals immediately. On the basis of this information every physician, dentist and veterinarian will be able to make a self appraisal of his physical qualifications. Within a few weeks the Procurement and Assignment Service will mail to all individuals a form on which they will be asked to state their preferences for assignment to all agencies of national defense which require medical, dental and veterinary personnel and for service in communities in public health and other civil categories. In this way every physician, dentist and veterinarian of the country will be able to lend maximum support to the national emergency. In order to meet the expanding needs of the military services, every physician immediately available for duty should mail his application blank to the Procurement and Assignment Service at once. All others will be given an opportunity to volunteer in the near future.

Frank H. Lahey, M.D., Chairman.	C. Willard Camalier, D.D.S.
James E. Paullin, M.D.	Sam F. Seeley, Major, M.C., U. S. Army,
Harvey B. Stone, M.D.	Executive Officer.
Harold S. Diehl, M.D.	

EDITORIAL COMMENT

HISTORY OF THE ARKANSAS MEDICAL
SOCIETY

The Journal publishes in this issue the last of the material assembled by the Committee on the History of the Arkansas Medical Society. Announcement will be made shortly of the availability of the History in bound form. This is being deferred at this time in order that other county medical societies may prepare and submit for publication a history similar to that of the Sebastian County Medical Society as published in this issue. It is felt that the history will thereby be made more complete and of greater interest to the entire membership. County medical societies are urged to give this immediate attention, advising The Journal if such a history is to be later furnished. Opportunity will be given for initial publication in The Journal and forms will be held a reasonable length of time for submission of data by county medical societies.

PROCEEDINGS OF SOCIETIES

Desha County Medical Society has elected the following officers: President, R. F. White, McGehee, and Secretary-Treasurer, Gibbs Biscoe, Dumas.

Searcy County Medical Society has elected the following officers: President, E. W. Wood, Marshall; Vice-President, J. O. Leslie, Marshall; Secretary-Treasurer, Sam G. Daniel, Marshall; Delegate, E. G. Fendley, Leslie. The Society reported 100% membership assessment payment on January 2nd.

Sam G. Daniel, Secretary.

Hot Springs County Medical Society has elected the following officers: President, M. D. Prickett; Vice-President, R. V. McCray; Secretary-Treasurer, B. T. Kolb; Delegate, W. G. Hodges, and Alternate, Agnes C. Kolb.

Polk County Medical Society has elected the following officers: President, B. H. Hawkins; Vice-President, H. G. Heller; Secretary-Treasurer, J. G. Hilton; and Delegate, H. G. Heller.

Little River County Medical Society has elected the following officers: President, E. R. King; Secretary-Treasurer, J. W. Ringgold; and Delegate, B. C. Routon.

Johnson County Medical Society has elected the following officers: President, Guy Shrigley; Vice-President, R. H. Johnson; and Secretary-Treasurer, G. R. Siegel.

The Southeast Arkansas Medical Society met with the physicians of Lake Village for fish dinner December 15th. The meeting was addressed by H. King Wade, Hot Springs National Park, "Hydronephrosis," and Alan G. Cazort, Little Rock, "Allergic Dermatitis."

Sevier County Medical Society has elected the following officers: President, J. S. Hendricks; Vice-President, C. A. Archer; Secretary-Treasurer, C. E. Kitchens; Delegate, R. C. Dickerson; and Alternate, C. E. Kitchens.

Lawrence County Medical Society has elected the following officers: President, H. B. Hull, Mammoth Spring; Vice-president, C. C. Townsend, Walnut Ridge, and Secretary-treasurer, Chas. D. Tibbels, Black Rock.

Bradley County Medical Society has elected the following officers: President, W. N. Roark; Vice-President, Rufus Martin; Secretary-Treasurer, R. F. Hoffman; Delegate, W. J. Hunt; and Alternate, Rufus Martin.

The Washington County Medical Society has elected the following officers: President, W. J. Butt; Vice-President, Chas. S. Paddock; Secretary-Treasurer, V. O. Lesh; Delegate, R. H. Huntington; and Alternate, J. F. Lewis.

Clark County Medical Society has elected H. A. Ross, President, and Joe W. Reid, Secretary-treasurer.

Lincoln County Medical Society has elected the following officers: President, C. W. Dixon; Vice-President, G. W. Ringgold; Secretary-Treasurer, L. T. Taylor; and Delegate, L. T. Taylor.

Madison County Medical Society has elected the following officers: President, N. J. Hill, Hindsville; Vice-President, G. D. Counts, Wesley; Secretary-Treasurer, Fred Youngblood, Huntsville; and Delegate, G. D. Counts.

The Nevada County Medical Society has elected the following officers: President, L. J. Harrell; Vice-president, C. A. Archer, Jr.; Secretary-treasurer, J. W. Kennedy; Delegate, J. B. Hesterly, and alternate, A. S. Buchanan.

The White County Medical Society has elected the following officers: President, M. C. Hawkins, Jr.; Vice-president, A. J. Dunklin; Secretary-treasurer, Sam J. Allbright; Delegate, D. W. Sloan, and Alternate, A. H. Hudgins.

The Fifth Councilor District Medical Society met in dinner session at El Dorado January 13th for the following program: "The Diagnosis of Digestive Disturbances and Their Physiologic Explanation," Lyle Motley, Memphis; "Rupture of the Intervertebral Disc as the Common Cause of Low Back Pain and Sciatica," R. Eustace Semmes, Memphis, and "Studies on Prostatic Cancer," C. B. Huggins and W. W. Scott, Chicago.

The Faulkner County Medical Society has elected the following officers: President, E. L. Dunaway; Vice-president, J. H. Downs; Secretary-treasurer, J. S. Westerfield; Delegate, N. E. Fraser, and Alternate, C. H. Dickerson.

The Mississippi County Medical Society was addressed January 6th by K. T. Mosley on "Epidemiology of Malaria in Mississippi County."

The Phillips County Medical Society has elected the following officers: President, A. W. Cox; Vice-president, Joe W. King, and Secretary-treasurer, H. H. Rightor.

Crawford County Medical Society has elected the following officers: President, B. B. Bruce; Vice-President, J. R. Crigler; and Secretary-Treasurer, S. D. Kirkland.

The National Conference on Medical Service will meet at the Palmer House, Chicago, Sunday, February 15th, for a discussion of topics pertaining to medical preparedness and the relation of medicine to the plans for improving our present-day national defense. Matters pertaining to civilian defense and to the procurement and assignment of physicians will likewise be presented in symposium form. All members of the Society are cordially invited to attend.

Chicot County Medical Society has elected the following officers: President, W. A. Craig, Eudora; Vice-president, E. Baker, Dermott; Secretary-treasurer, W. J. Schwarz, Lake Village; Delegate, J. H. Burge, Lake Village, and Alternate, W. D. Easterling.

Union County Medical Society has elected the following officers: President, J. W. Harper; Vice-president, D. E. White, and Secretary-treasurer, G. D. Murphy, Jr.

Ashley County Medical Society has elected the following officers: President, G. W. Fletcher; Secretary-Treasurer, C. S. Pool; Delegate, M. C. Crandall, and Alternate, L. G. Barnes.

The 68th annual banquet session of the Sebastian County Medical Society honored H. Fay H. Jones, President, Arkansas Medical Society, and F. W. Ewing, President, Oklahoma State Medical Association, on January 13th. The speaker was Lt. Col. L. D. Soper, Medical Corps, United States Army, who spoke on "Army Experience." W. F. Adams, Secretary.

Columbia County Medical Society has elected the following officers: President, H. K. Carrington; Vice-President, P. M. Smith; Secretary-Treasurer, J. H. Wilson.

The Hempstead County Medical Society has elected the following officers: President, J. E. Gentry, McCaskill; Vice-president, J. G. Martindale, Hope; Secretary-treasurer, Jim McKenzie, Hope; Delegate, J. G. Martindale, and Alternate, L. M. Lile, Hope.

Prairie County Medical Society has elected the following officers: President, J. R. Lynn; President-elect, Edward Adams, and Secretary-Treasurer, J. C. Gilliam. At a meeting held January 20th plans for civilian medical service were discussed and the following committee appointed: T. G. Porter, Edward Adams, J. C. Gilliam.

J. C. Gilliam, Secretary.

Franklin County Medical Society has elected the following officers: President, W. C. Porter; Vice-President, E. W. Pillstrom; Secretary-Treasurer, W. H. Gibbons; Delegate, W. C. Porter; and Alternate, W. H. Bollinger.

The Garland County Medical Society has elected the following officers: President, Louie G. Martin; Vice-President, F. S. Tarleton; Secretary-Treasurer, W. E. Gray; Delegates, Foster Jarrell, J. M. Proctor, and Driver Rowland; Alternates, A. G. Sullivan, H. King Wade, and D. C. Lee.

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PERSONALS AND NEWS ITEMS

Euclid M. Smith, Hot Springs National Park, has been elected a life member of the Alumni Association of the University of Arkansas.

Henry G. Hollenberg, Little Rock, has been appointed chief surgeon to the McRae Memorial Sanatorium, effective during the absence of Harvey Shipp on duty with the naval medical corps.

T. T. Ross, Little Rock, recently addressed the Hot Spring County Public Advisory Council at Malvern of the benefits of a full-time health unit.

MARRIED—At Winnipeg, Manitoba, December 20th, Miss Elizabeth Margaret Gibbs and D. H. Autry, Camp Robinson.

Ralph E. Crigler and C. B. Billingsley, Fort Smith, have been elected president and member of the board of directors, respectively, of the Fort Smith Boys' Club.

Lt. J. K. Grace, Gowen Field, Idaho, has completed the field training course at the Medical Field Service School, Carlisle Barracks, Pennsylvania.

C. B. Billingsley, Fort Smith, spent a recent vacation in Mississippi and Tennessee.

Hugh Johnson, Fort Smith, spent a recent vacation in Arizona.

Guy Shrigley, Jr., has been elected junior deacon of the Clarksville Masonic lodge.

J. B. Jameson has been elected a member of the Camden Council, Boy Scouts of America.

Paul L. Day, Little Rock, recently addressed the American Association for the Advancement of Science at Dallas on "Ocular Manifestations of Nutritional Deficiency."

"The Use of Various Sulfanilic Acid Derivatives in Trachoma," by K. W. Cosgrove and L. K. Hundley, Little Rock, appeared in the January Southern Medical Journal.

Euclid M. Smith, Hot Springs National Park, has been elected Vice-Chairman on the Section on Physical Therapy, Southern Medical Association.

H. E. Murry, Texarkana, has purchased the building at 320 East 5th Street and arranged it for offices.

MARRIED—R. J. Haley, Sr., and Mrs. Jewell Bradsher, at Paragould, January 4th.

R. J. Calcote and R. E. McLochlin, Little Rock, have been called to duty as Lt. Commander and Lieutenant, respectively, Naval Medical Corps, and assigned at the Naval Air Base, Corpus Christi, Texas.

H. King Wade, Hot Springs National Park, won the low gross tournament at the Southern Medical Association golf tournament held during the Saint Louis meeting.

L. K. Hundley and K. W. Cosgrove, Little Rock, were awarded honorable mention for their scientific exhibit on trachoma control in Arkansas at the Saint Louis session of the Southern Medical Association.

J. O. Boydstone, Hot Springs National Park, has been promoted to Major, Medical Corps, United States Army, and is now assigned at Camp Polk, Louisiana.

F. Walter Carruthers, Little Rock, addressed the American Academy of Bone and Joint Surgeons at Atlantic City January 12th on "The Treatment of Fractures of the Pelvis."

The Arkansas State Board of Health has elected the following officers: President, T. H. Wilson, Wynne; Vice-president, W. G. Hodges, Malvern, and Secretary, W. B. Grayson, Little Rock.

Wm. B. Connolly, Helena, has been assigned to duty as 1st Lieutenant, Medical Detachment, 153rd Infantry, Fort Raymond, Seward, Alaska.

Frank Vinsonhale addressed the Little Rock Lions Club recently on the work of the Red Cross.

M. K. Bottorff has been relieved from army service and has returned to Lake Village for practice.

Ellis Gardner has become associated with L. Gardner at Russellville.

Drs. B. T. and Agnes C. Kolb have moved from Donaldson to Malvern.

J. J. Monfort, Batesville, has been installed as Lieutenant-Governor, Ninth Kiwanis District.

C. P. Sisco, Springdale, recently addressed the commissioned officers of the 142nd Field Artillery at Fort Sill.

Paul L. Day, Little Rock, recently addressed a Fellowship meeting of the Winfield Memorial Church in Little Rock on "Physical Effects of Alcohol."

A. F. Hoge has been elected a director of the City National Bank at Fort Smith.

B. L. Ware has been elected vice-president of the Farmer's Bank at Greenwood.

I. R. Johnson has been elected vice-president of the Farmer's Bank and Trust Company at Blytheville.

Saint Vincent's Infirmary, Little Rock, has elected the following staff officers: S. C. Fulmer, chief of staff; Clyde D. Rodgers, vice-chief; C. A. Rosenbaum, secretary; Geo. Lewis, chief of surgery; J. N. Compton, chief of medicine, and E. H. White, chief of obstetrics.

J. S. Coffman has been elected a director of the Citizens Bank at Lavaca.

B. E. Hendrix, president of the Horatio State Bank for 37 years, has been elected honorary president.

W. J. Ketz has been elected a member of the City Library Board at Batesville.

J. W. Brown has been elected a director of the Bank of Pocahontas.

A. A. Blair, Fort Smith, spent a recent vacation in Selma, Alabama.

E. D. McKnight has been elected a director of the Bank of Brinkley.

A. M. Elton has been elected a director of the First National Bank at Newport.

O. R. Kelly has been elected a director of the Grant County Bank at Sheridan.

M. Y. Pope has been elected a director of the Union Bank and Trust Company at Monticello.

G. W. Fletcher, Montrose, was recently honored by the Chicot County Medical Society with a dinner and a memento, commemorating fifty years of practice.

Joe F. Rushton has been elected a director of the Citizen's Bank at Magnolia.

R. O. Norris has been elected a director of the Bank of Tuckerman.

Lt. John Dorman, stationed at Fort Sill, has been ordered to the Medical Field Service School at Carlisle Barracks, Pennsylvania, for training.

W. W. Johnston, Helena, has been called to active service as Lieutenant, Medical Corps, United States Army, and assigned at Fort Riley, Kansas.

G. F. McLeod has been elected chief of staff of the City Hospital, Magnolia.

J. H. Wilson has been appointed health officer for Columbia County.

E. F. Ellis has been elected a director of the First National Bank of Fayetteville.

RANDOM THOUGHTS OF THE SECRETARY

December 25th. On this Christmas Day we find ourselves at war to insure that men, women and little children everywhere shall once again know the meaning of "Peace on Earth; Good Will to Men."

January 1st. On this first day of the year giving a startled attention to the estimated income tax we are to pay. Well, that is the preliminary price we are to pay for an American way of living, and we cherish no illusions that there will be other than an increase in the rate for this year.

January 5th. Acting as secretary for the Sparks Clinical Staff, a duty which falls to our lot about one year out of three, we have a grandstand seat for the discussion in dialogue fashion between Crigler and Goldstein on Crigler's dissertation.

January 13th. Gathering tonight for the 68th annual banquet session of the Sebastian County Medical Society where we are privileged to honor President Jones of Arkansas and President Ewing of Oklahoma, an altogether happy function which witnesseth the reformation in toto of Earle Hunt and who shall say that 1942 will not be a year to be remembered?

January 15th. Comes a voluntarily censored letter from the Salt Lake naval district in which Amis recounts experience with naval rookies. Yet most illuminating is the tale of his understudy who becomes disturbed in a neurological manner, to which unkind critics would obviously comment: "I expected that!"

WOMEN'S AUXILIARY NEWS

Public relations work is inseparably associated with other departments of the Auxiliary. First, it is our duty to inform ourselves regarding medical activities, then to pass the information to lay organizations. Our work is most essential at this time in stressing health defense. Each of us has some part to perform; it is our duty to keep all club groups health conscious. We can suggest and cooperate with them in giving health programs and to see that they are given the right kind of material with which to work. Do not fail to have a program on "Nutrition." Our state board of health can give us plenty of information on this very important subject. Watch for changes in your papers in radio health program. The program, "You and Your Doctor" begins one-half hour earlier January 17th. We can cooperate with Hygeia committees to extend the benefits of this magazine's scientific articles. As wives of doctors we have plenty of work to do by a program of service in the cause of medical education.

MRS. H. T. SMITH, McGehee
Chairman, Public Relations.

DOCTOR'S DAY OBSERVANCE

Again we come to the month of March when we observe our annual day to honor the doctors of our state. We hope that each county auxiliary is making plans to devote one day this month to honoring the members of their county society in some special way.

It is so easy to let our good intentions remain merely intentions until suddenly we realize we've never gotten around to telling folks we really appreciate them. So let's remember this little poem when we're tempted to put off our observance of Doctor's Day.

DO IT NOW

If with pleasure you are viewing any work a man is doing,
If you like him or you love him, tell him now;
Don't withhold your approbation till the parson makes oration

As he lies with snowy lilies o'er his brow;
For no matter how you shout it, he won't really care about it;

He won't know how many teardrops you have shed;
If you think some praise is due him, now's the time to pass it to him,

For he cannot read his tombstone when he's dead.
More than fame and more than money is the comment kind and sunny,

And the hearty, warm approval of a friend,
For it gives to life a savor and it makes you stronger, braver,

And it gives you heart and spirit to the end;
If he earns your praise—bestow it: if you like him, let him know it;

Let the words of true encouragement be said;
Do not wait till life is over and he's underneath the clover,
For he cannot read his tombstone when he's dead.

—Berton Braley.

MRS. JIM MCKENZIE,
Chairman, Doctor's Day Observance.

The Woman's Auxiliary to the Craighead-Poinsett County Medical Society has been organized with the following officers: President, Mrs. O. T. Cohen, Jonesboro; Vice-President, Mrs. L. H. McDaniel, Tyronza, and Secretary-Treasurer, Mrs. M. E. Blanton, Jonesboro. Meetings will be held the first Thursday of each month.

OBITUARY

J. W. MORRIS, age 75 years, formerly of Denton and Black Rock, died at Safford, Arizona, December 12th. At one time he was president of the Tri-State Medical Society. Surviving relatives are two daughters and a son.

CLINTON AMOS HARDESTY, age 65 years, died of a heart attack at his home in Paragould January 10th. Born in Ohio, he began the practice of medicine in Paragould shortly after his graduation from the Saint Louis College of Physicians and Surgeons in 1910. Surviving relatives are his wife and several brothers and sisters.

ROBERT WAKEMAN CUPP, age 58, of Marmaduke, died January 17th. Born in Greene County, he graduated from the Kansas City College of Medicine and Surgery in 1919. He had practiced at Beech Grove, Paragould and Marmaduke. Active in civic affairs, he had served as president of the school board and was formerly cashier of the bank at O'Kean. Surviving relatives are his wife, two daughters and a son.

ERNEST H. HARRIS, age 61, died at his home in Coy January 15th. A graduate of Ouachita College and the College of Physicians and Surgeons in Little Rock in 1911, he had practiced at Coy for 30 years. Surviving him are two sons and three brothers.

COMMUNIQUE

Jan. 13, 1942.

To the Editor:

Well, we are enjoying life in the Navy. So far it has been the best vacation I have ever taken. We have a hospital average of 160 patients and 26 doctors to take care of them. Another man and myself are in charge of an orthopedic ward with 14 patients. In order to keep a semblance of having some patients and not get assigned to some undesirable detail like running the family clinic we keep patients with fractures of the distal phalanx of the little toe in bed one week. Today is the busiest day I have had—I helped amputate a finger and helped with a hernia. So I think that I will rest this afternoon.

Calcote arrived Friday and is getting himself assembled. He is to come on duty tomorrow. There is another EENT man here. They have one

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DR. EDWIN C. HAMBLIN, Durham

Gynecology

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Medicine

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patient between the two of them. Calcote is going to specialize on the right eye, and the other man the left.

You would enjoy it here. It is a heckler's paradise. You can't even fill a fountain pen without being heckled. And when you operate it is a field day for them. The X-Ray department as usual seems to bear the brunt of it. Everybody has to look over every film, and every report and make appropriate remarks. They are well equipped having a 500MA General Electric job with rotating anode tube, a portable 135 KV GE therapy machine, and a Mattern portable for ward work. There are two roentgenologists in charge.

All the men with the exception of the CO, his executive, and the dentist are Reserves and are top notchers. They are all very likeable. You had better change your mind and apply for a commission.

I had a long letter from Jim Amis. He seems to be making up for lost time from the standpoint of work. McLochlin, Calcote, and myself are sharing an apartment in the basement, which we call the dungeon, until we can get located. The only undesirable feature about this place is the lack of living quarters, and that is being rapidly taken care of by a federal housing project for Naval officers only.

Many thanks for the Journal—I certainly enjoyed reading every word of it. Maybe I will find time to review "Functional Pathology." Well, must get my rest in.

Sincerely,

Fred H. Krock.

BOOK REVIEWS

Functional Pathology: By Leopold Lichwitz, M. D., Chief of the Medical Division of the Montefiore Hospital; Clinical Professor of Medicine, Columbia University, New York. Pp. 570. 198 illustrations. Price \$8.75. New York: Grune and Stratton, Inc., 1941.

This is a volume dealing with the signs and symptoms in their relationships to the individual and to the various structures of the body. The work is a result of the author's personal studies and observations and will not entirely agree with generally accepted teachings.

Immunology: By Noble Pierce Sherwood, Ph. D., M. D., F. A. C. P., Professor of Bacteriology, University of Kansas; Pathologist to the Lawrence Memorial Hospital, Lawrence. Second edition. Pp. 639. Illustrated. Price \$6.50. Saint Louis: C. V. Mosby Company, 1941.

This text discusses the principles involved in infection, immunity and diagnostic tests. As a textbook it considers the primary medical sciences in their relationships with the theories of immunity. Definitions are well presented and a rather complete reference list is appended to most chapters. The problems of allergy receive special attention.



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CAUDAL ANESTHESIA IN PROCTOLOGICAL SURGERY *

HUNTER A. CAUSEY M. D.

Pine Bluff

The first dates which I have been able to find for this type of anesthesia give credit to Cathelin in 1901; however, it remained until 1910 before Lawen achieved marked success with the procedure. It is sometimes referred to as caudal block. It is an extra or epidural block, none of the anesthetic fluid entering the intradural spaces. Buie has used it in 15,000 cases and says it is the most satisfactory anesthetic for proctologic surgery. Hirschman makes the statement in his book that this type of anesthesia has progressed to the stage in which, "we employ caudal anesthesia for most of our anorectal surgery." In fact, it can be used not only for surgery of the anus and rectum, but also for practically all operations below the floor of the pelvis including the perineum. Bacon makes the statement "caudal analgesia is ideal for operations on the anus and rectum and is characterized by a greater margin of safety than is the intradural method." Personal communication with Block of Chicago, with whom I have studied, tells me that he is reporting 2,000 cases in a paper at the present time. Some of these I had the pleasure of observing.

This type of anesthesia can be applied to all anorectal or proctological surgery. It should not, however, be used where actual disease of the sacrum and coccyx exist, or where there is infection of the soft tissue over the sacro-coccygeal areas due to the fact that one might introduce further infection with possibilities of meningeal infections resulting from the procedure.

My experience with this type of anesthesia includes fistula, fissure, cryptitis, papillitis, pec-

tinotomy, hemorrhoids and procidentia (2 cases) done according to the Mikulicz technique with from 10-12cm of the rectum being removed with entire satisfaction. I have seen very few failures if the proper procedure is carried out and the operator has had the proper training. The figure given by Bacon of 25% is far above that given elsewhere; Block gives his as about 4%. One gets quick and complete anesthesia with a greater degree of safety. I have seen the sphincter completely relaxed in 3-5 minutes after the withdrawal of the needle and in some cases there is instantaneous relaxation. In this relaxation there is no need for the stretching of this muscle which might later result in unwanted results.

The sacral hiatus is the lower extreme part of the spinal canal. It is formed by the failure of the closure of the lamina of the last sacral vertebra, being covered by the sacro-coccygeal membrane, bounded on each side by the sacro-coccygeal ligament. At the junction of the sacrum and the coccyx we find this space, being bounded above by the 4th sacral vertebra and the sacral cornua on each side. The sacral canal is a prismatic space occupying the whole height of the sacrum with its upper part is connected with the spinal canal of which it is a continuation. Its lower extremity is the sacral hiatus. This canal follows the curve of the sacrum, especially that of its posterior surface. Its walls follow the anterior and the posterior aspects of the bone being larger at the upper portion. Its contents are highly vascular adipose tissue, communicating freely with the epidural space of the lumbar region. In this there is embedded: (a) dural sac, continuation by the filum terminales; (b) Sacral nerves, coccygeal nerves, and (c), Sacral venous plexus. The sacral nerves come out in a fan shape. The dural sac ends usually at the 2nd vertebra, but may go below this.

Preoperative medication is that used in the spinal anesthesia case, because of the fact that

* Read before the Sixty-sixth Annual Session, Arkansas Medical Society, Little Rock, April 16, 1941.

if the caudal anesthesia is not successful, then one can use the low spinal.

Technique

All of the patients for proctological surgery are operated in the prone position lying on the abdomen with the buttocks up. A folded pillow is placed under the lower abdomen to elevate the buttocks, the gall bladder or kidney rest on the table may be used for such purpose. The Trendelenburg position is quite good here for it facilitates both the giving of the anesthetic and exposure of the operative field. The hands may be supported on the extension from the table. It is also desirable to use the head down position as it helps to prevent shock. I do not shave routinely the perianal hair, for when these hair grow out they stick the skin and cause the patient discomfort. Further, this procedure would not make the rectal operation more sterile. The areas over the sacrum and the coccyx are prepared as one would for any type of surgery. The sacral hiatus is palpated for in the beginning of the gluteal cleft. The lowest superficial portion of the sacrum is the 4th spinous process, and just below it and going from it to the coccyx is the sacro-coccygeal ligament which presents a depressed area. Lateral to this depression can be palpated the two sacral cornua. With the 4th sacral spinous process as the apex of the triangle, and the two sacral cornua as the bases, the center of this triangle represents the area in which one is to introduce the needle first to gain entrance into the sacral canal. First one produces a wheal with 1% novocain using a 25-gauge needle. A 22-gauge needle is then introduced in the same opening as the initial puncture through the wheal perpendicular to the skin infiltrating as the needle is pushed downward until it passes through the sacro-coccygeal membrane striking bone which is the dorsal surface of the sacrum. It is advisable to leave this needle intact until the No. 18 spinal puncture needle is introduced through the same puncture wound. Holding the spinal needle between the thumb and the 2nd finger with the index finger over the stylet, it is introduced through the original puncture wound, the bevel being up, perpendicular to the skin down through the skin and sacro-coccygeal membrane to the dorsal surface of the sacrum. The needle is then gently withdrawn slightly, then from the perpendicular to rather an acute angle of 45 degrees, the hilt is depressed and advanced forward to enter the sacral canal just under the lowermost roof of the sacral canal which is formed by the

lamina of the 4th sacral vertebrae. If the needle strikes bone it cannot be advanced and will bend. It should not then be forcefully pushed for it cannot enter the sacral canal in this manner. The needle should be withdrawn slightly and the angle changed to fit the circumstance. Sometimes the raising of the buttocks with pillow will help here. The entrance of the needle into the sacral canal properly does not require much force, and there is a sensation not unlike the passage of the lumbar puncture needle through the coverings of the spinal cord. One cannot say exactly how far the needle should be advanced by numerical figures due to differences of anatomical make up; however, one can measure or estimate from the length of the stylet on the skin surface. The idea as to how much of the needle should be inserted comes only from repeated practice on the cadaver and the live subject. When one is satisfied the needle is in the sacral canal, the stylet is withdrawn to denote whether blood or spinal fluid escapes, either of which are contraindications for injection of the novocaine. In the event of the puncture of one of the large venous sinuses, the needle is withdrawn slightly and rotated, reaspirated; if no blood is obtained, then your injection can be begun. Occasionally the dural sac extends down to the level of the 2nd sacral foramen where the needle may enter. Should you continue to get blood on aspiration after several attempts to reinsert or readjust the needle, it is advisable to stop and give patient a low spinal of from 50-75 mgm. of novocain. When one is satisfied that the needle is properly in place, from 30-45cc. of 2% novocain is slowly injected. This should not necessitate any force in injecting the solution. The amount of solution is in proportion to the size of the individual and the length of the operative procedure. For those hypertensive patients, who we know from experience, get falls in blood pressure during this anesthesia, a small amount of adrenalin is added to this novocain solutions (8-10 drops to the ounce). While injecting the solution, the opposite hand is placed over the sacrum to palpate for any swelling in the subcutaneous tissues. These tissues are also watched. When the needle is superficial to the canal and in the soft tissues, there will be noted an early swelling which means your anesthetic solution is not in its proper place. Quite often during the injection the patient will complain of feeling tight in the lower back or maybe a shooting pain down one of his legs. When the injection is completed, and it should not be too rapidly injected, the needle is with-

drawn and a cotton applicator which has been dipped in collodion is placed over the puncture wound, and the finger compresses the cotton against it so that when the collodion soaked cotton adheres to the opening and seals the point of entrance properly. The blood pressure is taken intermittently by the anesthetist assistant, taking care to notice any fall in the blood pressure, especially in the hypertensive case. This fall in blood pressure can be satisfactorily taken care of by repeated or single injections of adrenalin to fit each situation. Sensations of faintness or nausea can be controlled by the methods applied when using spinal anesthesia such as lowering the head, inhalations of carbon dioxide, or cold compresses to the neck and face. Care should be taken not to force the solution under too great a pressure. Usually almost as soon as the injection has been completed there is complete relaxation of the sphincter muscle. The tactile sensations, however, do not disappear so rapidly. One should not be too hasty in beginning the operative procedure; the degree of skin anesthesia can be easily tested by grasping the skin with tissue forcep before using the knife. This whole procedure must be carried out in detail from the initial wheal in the skin with the small 25-gauge needle to the proper infiltration below for the patient usually has more dread of the pain from the needle than he has for the operative procedure. This type of anesthesia has been entirely satisfactory in my experience which includes private work and institutional work at the Arkansas Penal Farm at Varner, Arkansas. I feel some of the failures chalked against the anesthesia are due to lack of using sufficient novocaine solution, and failure to get solution in its proper place. Those patients with their heavy fatty tissues over this region are best given intradural anesthesia if you cannot satisfactorily palpate the sacral hiatus.

COMING MEDICAL MEETINGS

New Orleans Graduate Medical Assembly, New Orleans, March 2nd-5th.

Association of Allergists for Mycological Investigation, Little Rock, March 5th, 1942.

Southwest Allergy Forum, Little Rock, March 6th, 1942.

The Second American Congress on Obstetrics and Gynecology, Saint Louis, April 6th-10th, 1942.

Arkansas Medical Society, Hot Springs National Park, April 27th-29th, 1942.

American Medical Association, Atlantic City, June 8th-12th, 1942.

REPLACEMENT THERAPY OF GONADOTROPICS *

(Female)

G. REGINALD SIEGEL, M. D.
Clarksville

The accumulation of knowledge concerning the ductless glands and the effect of their internal secretions have progressed through three distinct phases.

(a) The first dates back to ancient times and leads to the middle of the nineteenth century. It deals with theoretical speculation regarding their function. During this first epoch Galen knew of the pituitary.

(b) The second extends through the latter half of the nineteenth century and has to do with the experimental epoch. During this time withdrawal effects of the internal secretions were studied by removing the endocrine glands from animals. Animal experimentation was introduced by Claude Bernard in 1857. These effects established the necessity of many of these glands for the physiologic processes of the body. These experiments related the etiology of many obscure diseases to the endocrine glands.

(c) The third epoch, covering thirty years of this century, may be termed the biochemical era because during this time the active principles of the most important of these glands have been isolated and their specific actions demonstrated. The greatest benefit of this era has been derived from replacement effects, showing the interrelationship of the function of the endocrine glands and the correlation of the action of their hormones upon other organs and processes of the body. This epoch is very prominent in the field of research because at this time the withdrawal experiments are directly responsible for the explanation of some of the clinical entities due to endocrine deficiency.

The first two phases in the life of endocrine study did not provide sufficient knowledge for positive endocrinologic deductions, although during these two eras a definite foundation for subsequent study was provided. Right up to the beginning of the present century unverified endocrine relations and deductions were so vague and indefinite as to cause a good deal of wrangling and came to be in medical disrepute. During the past thirty-five years the determination of the incretory action has been so conclusive as to place endocrinology among the rec-

* Read before the Sixty-sixth Annual Session, Arkansas Medical Society, Little Rock, April 16, 1941.

ognized fields of medicine. The functions of the most important endocrine glands have been established by both the withdrawal and replacement effects.

One or more hormones have been isolated from each of five endocrine glands, the thyroid hypophysis, ovaries, suprarenals, parathyroids, and pancreas. These hormones consist of pituitrin (1895), adrenalin (1901), thyroxin (1914), insulin (1921), growth hormone (1921), sex hormones (1928), parathormone (1924), folliculin (1923), pitocin and pitressin (1928), progestin (1928), theelin (1929), thelol (1930), and emmenin (1930). In addition to these extracts and synthetics, we have many endocrines, the authenticity and specificity of which have not been demonstrated.

Paul Guernesey has listed the appearance of the endocrine series in the following order: (1) gonads, (2) thyroid, (3) hypophysis, (4) epiphysis, (5) pancreas, (6) spleen, (7) interrenal and suprarenal, (8) thymus, and (9) parathyroids.

To this point I have depended upon the history of the endocrine research of our predecessors. From this on I wish to confine my subject to the female gonadal system, in which field I have had some experience. During the years from 1924 to 1930 those interested in glandular therapy dabbled with various preparations, such as, ovarian substance, corpus luteum, and thyroid, administering the drugs to their patients both orally and by the hypodermic route. It was believed that some results were obtained from these preparations. The imported substances, mainly those from Germany, seemed to produce better results than our American preparations.

Dysmenorrhea, amenorrhea, and menorrhagia were complex problems. We often resorted to many curettages on the patient for relief, only to have the same condition arise again within several months. Of course, we endeavored to rule out malignancy, and usually did in the younger patients, but we did little, until recent years, towards regular uterine scrapings at various intervals of the menstrual cycle to determine what factor was predominant in causing a recurrence of the same condition month after month. We still were not doing much for the female in her severe climacteric, except to administer bromides by mouth and to use suggestion, telling her that time would take care of her condition as soon as nature could compensate her condition. We did not consider any replacement was needed in cases that required destructive surgery, radium, or X-ray therapy.

In the past five years introduction of the estrogenic hormone has relieved the severe symptoms of all classes of the climacterics to such an extent that they are no longer a menace to the peace of mind of either the patient or the attending physician.

The hormone of pregnant mare serum has proved very beneficial in what we term the cyclic treatment. This serum injected into the female is capable of producing an effect closely resembling that of the normal gonadotropic secretion of the anterior pituitary gland. Better than sixty-five per cent of all cases treated in this office for menstrual dyscrasias have responded to this form of treatment that had previously proved refractory to all other types of treatment available.

The best results were obtained in oligomenorrhea in which a positive response was obtained in 25 out of 34 cases treated. Fair results were obtained in hyperpolymenorrhea, 7 out of 8 cases responded to treatment. In anovulatory bleeding, 8 out of 10 women ovulated following treatment and 4 became pregnant.

Only fair results were obtained in secondary amenorrhea and the least satisfactory results were obtained in primary amenorrhea.

The criteria of positive response to treatment with pregnant mare serum were considered to be: (1) differentiative or secretory phase of the endometrium, (2) premenstrual vaginal cytology, and (3) persistent cyclic bleeding following cessation of treatment.

Timing the injection of the hormone is the most important factor in the treatment. Cyclic therapy is indicated. Experiments have shown that 60 to 80 units of gonadotropic hormone are required to stimulate activity in the relatively normal or immediate subnormal ovary, therefore, in cases of secondary amenorrhea, oligomenorrhea, hyperpolymenorrhea, and anovular cyclic bleeding 5 or 6 doses of 10 units each should be given intramuscularly on each consecutive day during the early phase of the menstrual cycle and concluded on the fourteenth day of the cycle with a dose of 30 to 50 units given intravenously. This course should be repeated in 4 to 6 weeks.

In primary amenorrhea with failure of sex characteristics and in some cases of secondary amenorrhea continuous therapy may be employed. We usually give 20 units 3 times a week for 3 weeks, or 10 units daily over a period of 4 weeks. A rest should be allowed at 6 weeks to 2 months to prevent antihormone formation or body resistance.

Most of these cases respond better if short wave diathermy is used intravaginally and over both ovarian poles. The heat should be applied as strongly as the patient can stand without great discomfort and should be continued for at least a 20-minute period. We have found light doses of filtered X-ray worthy of mention, using about 50 KVP. and 3 (ma.) for 4 minutes over the region of the ovaries, using only the anteriorposterior position and not repeating under 10 days. Every case should be carefully examined before endocrine therapy is instituted and all abnormalities corrected. Those cases coming under the head of anemia will respond to diet and liver-iron therapy alone.

In considering the cases of ovarian hypofunction, we must first consider the normal ovary. The ovary of the newborn may contain as many as 140,000 primordial follicles. Evidence of slight hormonal activity is seen in the occasional follicle growth and cystic atresia seen at this time. This is explained by the presence of maternal gonadotropes in the fetal circulation. From childhood to puberty many of the primary follicles undergo degeneration so that at the menarche their number is considerably reduced.

Follicular phase. At the onset of each menstrual cycle the growth of a number of primary follicles is initiated by the follicle-stimulating hormone of the anterior lobe of the hypophysis. Usually only one reaches full maturity. The others are blighted at various stages in their development and undergo follicular atresia or degeneration. Growth of the follicle is manifested by increase in size, proliferation of the granulosa cells, and the formation of a follicular cavity filled with fluid. At about the midinterval of the menstrual cycle the mature Graafian follicle bulges above the surface of the ovary. The ovum is found imbedded in the discus proligerus, a peninsula of granulosa cells projecting into the distended follicular cavity. Surrounding the basal granulosa cells several layers of epithelioid, theca interna, cells may be seen. Just prior to ovulation many of these are luteinized. The theca externa is less differentiated and merges into the surrounding parenchyma. Rupture of the Graafian follicle with expulsion of the ovum marks the end of the follicular phase of the ovarian cycle. Similarly, it marks the end of the proliferative phase in the endometrial cycle, which had progressed under the influence of the estrogenic hormone secreted during follicle growth.

Luteal phase. The luteinizing hormone of the anterior lobe of the pituitary gland is concerned

with the development of the corpus luteum. The activity of this structure is responsible for the secretion of progesterone, which controls the secretory phenomena in the endometrium from the time of ovulation to menstruation.

Immediately after ovulation the collapsed follicle is lined by a gray wall of granulosa cells which in turn is surrounded by a partially luteinized theca interna. The granulosa cells proliferate, enlarge, and are converted into polygonal or round lutein cells. At the stage of maturity the corpus luteum is yellow in color, with a corrugated or festooned outline and a central core of fibrin and blood. Shortly before menstruation regressive changes are noted which are correlated with a diminution in cellular activity and progesterone secretion. The corpus luteum becomes smaller, loses its vascularity, and shows degeneration of the lutein cells. A cross-section of a normal ovary will show several corpora lutea in various stages of retrogression.

Having this picture of the normal development of the human ovary in our mind, we can begin to discuss the common type of primary ovarian hypofunction.

The women in whom primary ovarian hypofunction is found are usually of the eunuchoid type. They may be from moderately tall to extremely tall, having the typical skeletal disproportion in which the extremities are longer than the measurement of torso and head. They are distinctly feminine, the bones are small, the features are fine and attractive, and the voice is usually soft, but can be pitched very high. These women always show varying degrees of genital hypoplasia accompanied by a scant or absent menses. Those in the class of amenorrhea are profound in their failure to show menarche. The time ranges from 40 days to 1, 2, 3, and 4 years. This type woman is inclined to frigidity. Physical endurance is decreased and anemia is prone to occur. They are, as a rule, emotional and quickly change character and are self-lovers, or selfish.

The basal metabolic rate in these cases must not be relied upon as a criterion, but must be evaluated along with other subjective and objective symptoms.

The excess excretion of the hormone estrogen in these cases is very likely due to an abnormal permeation of the kidneys because of the inability of the endometrium to concentrate and utilize what little is present in the circulation. Frequent kidney action is the rule in most of these cases in and around that period of the

cycle which in normal individuals would be 14 to 16 days following the last regular menses.

We have found many of these cases to respond to the combined use of theelin and progesterone. In 11 cases out of 52 the response was within 90 days. In 22 cases the response was within 6 months. In 3 cases treatment and observation were carried on for 3 years and longer. During this time normal menarche was obtained, but never on a regular cycle basis, i. e., 28, 29, or 30 day-periods.

We usually start these cases with 10,000 units of theelin, repeating every other day after the first dose with 2,000 units, until 24,000 units have been given. If a menses does not ensue, we then give 1 cc. of progesterone twice weekly until we have obtained a moist sterile discharge in the vaginal vault. We then discontinue all treatment for a period ranging from 28 to 42 days and start again, increasing the theelin to 3 doses of 10,000 units each given every other day, and carry on with 2,000 units twice weekly until 48,000 units have been given, or the patient menstruates.

In closing, please allow me to suggest once more that the patient should first have all other reasons for lack of menses ruled out before such treatment is instituted and that her general physical condition must be carefully guarded at all times.

MODERN METHODS OF IMMUNIZATION

Physicians who are concerned with the immunization of infants and children have as their goal the use of materials which will not sensitize the patient and the utilization of routes of administration that cause least discomfort. Definite assistance toward these objectives is provided by use of combined antigens in the opinion of a recent observer (J. Florida M.A., 28:330, 1942). The author has employed Combined Diphtheria Toxoid-Tetanus Toxoid, Alum Precipitated (Lilly) for the last three years without any untoward reactions.

The combination of diphtheria and tetanus toxoids is effected by mixing suitable amounts of the respective toxins which have been detoxified by the use of formaldehyde, and precipitating from this combination with alum the diphtheria and tetanus toxoids. The individual toxoids are tested for toxicity prior to mixing, and the combined alum precipitated toxoid is tested for toxicity after precipitation. Potency is determined by injecting guinea pigs with a human dose. After four weeks the blood serums of these animals must show at least 2 units of diphtheria antitoxin and 2 units of tetanus antitoxin per cubic centimeter of blood serum.

Should exposure to either diphtheria or tetanus occur before immunization against each disease is completed, the usual procedures for immediate protection of unimmunized subjects should be considered. The combined toxoid is not for treatment, it is a prophylactic measure of active immunization against diphtheria and tetanus.

A SATISFACTORY SUPRAPUBIC CYSTOTOMY *

G. W. REAGAN AND JOHN N. ROBERTS

Little Rock

A suprapubic cystotomy is becoming more necessary due to injuries of the bladder from automobile accidents, and ruptures of the urethra either from automobile accidents or straddle falls. People are growing to a more advanced age and more malignancies and stones are forming in the bladder which frequently require this operation, and most important of all, is that we are learning that patients with bladder neck obstruction have much better drainage and that kidney impairment is relieved much more quickly and more satisfactorily by this procedure. In fact, some urologists have come to the point that they believe all patients should have suprapubic drainage before they have prostatic surgery.

I believe more surgeons would perform this operation if they had learned to do it so as to control the urine satisfactorily. The main purpose of this paper is to demonstrate a technique whereby the patient can be operated on safely, without shock, and a suprapubic tube inserted which stays put and carries away the urine for an indefinite period of time. In fact, the tube takes care of the urine so satisfactorily that these patients sometimes go as long as a week at a time without the dressing having to be changed.

Most all operations of this type that are described in surgical textbooks require either suction or syphon drainage. This requires the patient to be continuously in bed and in a hospital. Since these patients usually have to have drainage from one to three months it becomes a very expensive procedure if such methods are used. Too, the aged patient does not tolerate being in bed, and for that reason, it is very necessary to make the bed confinement as short as possible. By this method the patient can be gotten up on either the third or fourth day, and by the end of the second week is usually ambulatory and can go about almost as free as if no drainage tube were present. I do not claim originality for this procedure, but so far I have been unable to find it described in a textbook on surgery.

The first procedure is to insert a catheter into the bladder and wash it out until the solution returns clear. Then the bladder should be filled with either saline or boric acid solution. Eight to twelve ounces should be put into the bladder

* Presented, with motion pictures, before the Sixty-sixth Annual Session, Arkansas Medical Society, Little Rock, April 15, 1941.

so that it can be easily palpated. If the bladder is not prepared in this manner the urine will come in contact with the tissues and a slough will take place which takes weeks to heal, while if this procedure is carried out, the wound will heal by first intention in 99% of the cases.

The operation is performed under local anesthesia by the technique of LaBat. 1% novocain is used throughout. The skin and subcutaneous tissue is thoroughly infiltrated, beginning at the level of the umbilicus and on the outer border of the rectus and extending to the superior border of the symphysis. The area along the superior border of the symphysis is infiltrated to join the lateral infiltrations. The rectus muscle is then anesthetized by injecting eight ccs. of the solution at three different areas from the umbilicus to the symphysis. One can tell when the muscle is penetrated by the feel as the needle passes through the rectus sheath. A No. 21 or 22 needle, two to three inches long, is now inserted into the prevesical space just above the symphysis. 20 ccs. of the solution is now injected in this location. The position of the needle is now changed laterally, first on one side and then on the other, and 10 ccs. of the solution is injected on each side of the bladder. Ten minutes is given, by the clock, for this anesthetic to take effect.

The abdomen is opened by a midline incision beginning at the superior border of the symphysis (not at the base of the penis). Incision extends superiorly for about two inches. The fascia is opened and the muscles are separated in the midline. The peritoneum is retracted with blunt dissection to the antero-superior border of the bladder. The bladder wall is recognized by the large venous vessels. It is now grasped at the most superior point of exposure by Allis clamps. A one-inch needle, with syringe attached, is now inserted into the bladder at a point between the two Allis clamps. Aspiration shows if the needle is in the bladder. With the needle as a guide an incision is made in the bladder wall large enough to insert the index finger. The edges of the incision are now grasped with Allis clamps to be sure that we do not lose our bladder opening. It is best to have a suction to take away the solution that comes from the bladder, but this is not absolutely necessary. After the bladder has been emptied, the index finger should be inserted into it and the contents palpated for stones, tumors, or prostatic enlargement or obstruction. If stones or tumors are to be removed the incision in the bladder has to be made large enough to work through. After palpation and

you are satisfied of your findings, a tube should be inserted into the bladder, either the Pezzer type or the double strength Malcot four-wing type catheter. The size of this catheter should be between 26 and 36. The larger type drains more satisfactorily and is not so likely to become occluded. The opening in the bladder is now closed about the catheter with No. 1 chromic catgut.

At this time the wound should be thoroughly washed with saline or boric acid solution to make sure that no irritating solutions are left in the wound.

The abdominal wound is closed with three silkworm sutures, the upper one passing through the edge of the catheter enough to hold it. The catheter is always brought out at the extreme superior angle of the wound. Two rubber tissue drains are now placed in the spaces of Retzius. The muscles and fascia are now closed with interrupted sutures of No. 1 chromic catgut. The silkworm sutures are now tied, and if the skin is not approximated by the silkworm sutures the skin is closed with No. 1 plain catgut or silk.

The secrets of the operation are to open the bladder wall at its superior anterior junction, and to bring the catheter out the superior angle of the wound. When the catheter is placed in this position all urine will drain through it as long as the catheter remains in the bladder or does not become occluded.

The wound is dressed, the patient is returned to his room, and the catheter is attached to a large tube which leads to a receptacle to collect the urine. On the third day the wound is redressed and the rubber tissue drains removed. On the fifth day the two lower silkworm sutures are removed, and at the end of two weeks the superior suture holding the catheter is removed. By this time the wound has healed sufficiently to hold the catheter in place. This catheter will remain and drain satisfactory for an indefinite period, unless it becomes stopped. Should this happen the catheter can be removed, cleaned, and replaced with a catheter stillette with very little pain to the patient.

The Physicians Casualty Association announces:

"In these days when we are all confronted with a question of shortages in various commodities and an increase in the price of those obtainable, we are happy to announce that not only will we continue to carry our policyholders at no increase in the cost of their accident and health insurance but we adopted a resolution to the effect that there shall be no restriction under our policies by reason of Army, Navy or Marine Service and this is irrespective of where such service may take the policy holder."

ARKANSAS STATE HIGHWAY COMMISSION INSURANCE BENEFITS

For the information of the medical profession and of the employees of the Arkansas State Highway Commission there is enumerated below an outline of the benefits arising from the group insurance policy provided for by the Commission. It will be noted that additional benefits are given to those set out in our bulletin of June 5, 1941. Particular attention is called to the increase in hospital and surgical benefits.

1. For employees whose salary is \$1,800.00 per year or over, the Insurer will pay the following amounts:

FOR LOSS OF:

Life (The Principal Sum).....	\$3,000.00
Both Hands, or Both Feet.....	\$3,000.00
Both Eyes	\$3,000.00
One Hand and One Foot.....	\$3,000.00
One Eye and One Hand or One Foot.....	\$3,000.00
One Hand or One Foot.....	\$1,500.00
One Eye	\$1,000.00

2. For employees whose salary is under \$1,800.00 a year, the Insurer will pay the following amounts:

FOR LOSS OF:

Life (The Principal Sum)	\$2,000.00
Both Hands, or Both Feet.....	\$2,000.00
Both Eyes	\$2,000.00
One Hand and One Foot.....	\$2,000.00
One Eye and One Hand or One Foot.....	\$2,000.00
One Hand or One Foot.....	\$1,000.00
One Eye	\$ 666.00

3. For loss of time as result of the injury, the Insurer will pay 75 per cent of the average salary of the employee, and provided that such payments shall not exceed \$25.00 per week nor for a longer period than Twenty-Six (26) weeks.

4. The Insurer will pay hospitalization at the rate of \$3.00 per day for actual confinement, but not for a longer period than three (3) weeks.

5. Doctors and physicians will be paid at the rate of \$1.50 per visit up to the amount of \$30.00.

6. Upon receipt of due proof that an injured employee has undergone any of the operative procedures listed in the Schedule of Surgical Benefits as a result of "such injury," and performed by a duly qualified physician or surgeon, the Company will reimburse such employee for the Surgical Fees incurred by such employee for such operation, but in no case to exceed the limit for such operation as provided for the Schedule of Surgical Benefits, provided that the maximum reimbursement for all operations during any period of continuous disability shall be \$150.00.

If two or more of the operations shown in the Schedule of Surgical Benefits are performed at the same time, or in immediate succession, or under one anesthetic, the maximum reimbursement will be the largest of the maximums for the individual operations.

The surgical benefits listed supra are in addition to paragraph (5) of this bulletin.

The payments under the policy shall be for only those injuries that occurred while the employee injured was pursuing his duty as an employee of the Commission.

Any injury occurring as a result of intoxication will not be classified as a liability against the Insurer, nor will indemnity be paid for fits, hernia, or orchitis. The 75 per cent indemnity will be paid direct to the injured employee, but the bill of a doctor or hospital will be paid by sending the check to the doctor or hospital.

SCHEDULE OF SURGICAL BENEFITS

	Maximum Reimbursement for an Employee
Operations	
AMPUTATION OF	
Thigh	\$ 75.00
Leg, entire foot, arm forearm or entire hand	50.00
Fingers or toes, each.....	10.00
DISLOCATION, Reduction of	
Hip or knee joint (patella excepted).....	35.00
Shoulder, elbow or ankle joint	25.00
Lower jaw	15.00
Collar bone or wrist.....	10.00
For dislocations requiring an open operation, the maximum amount of reimbursement will be twice the amount shown above.	
EXCISION, Removal of	
Shoulder or hip joint.....	100.00
Knee joint	75.00
Elbow, wrist or ankle joint.....	50.00
EYE	
Any cutting operation into the eyeball (through the cornea or sclera).....	50.00
Removal of eyeball	35.00
Any other cutting operation on the eyeball	20.00
FRACTURE, Simple	
Thigh, leg, kneecap, upper arm, vertebra or vertebrae, or pelvis (coccyx excepted)....	50.00
Lower jaw (alveolar process excepted), collar bone, shoulder blade or forearm.....	25.00
Wrist, hand, ankle or foot.....	15.00
Fingers or toes, one or more.....	5.00
Nose, rib or ribs.....	5.00
The amounts shown above are for simple fractures.	
For compound fractures, the maximum amount of reimbursement will be one and one-half times the amount shown above for the corresponding simple fractures.	
For fractures requiring an open operation, the maximum amounts of reimbursement will be twice the amount shown above for the corresponding simple fractures.	
JOINT, Incision into (tapping excepted).....	25.00
LIGAMENTS, Cutting operation.....	25.00
Suturing of tendons	
Single	25.00
Multiple	40.00
SKULL, Cutting into cranial cavity.....	150.00
SPINE OR SPINAL CORD, OPERATION with removal of portion of vertebra or vertebrae (except coccyx)	
Removal of part or all of coccyx.....	50.00

In notifying this office of such claim for indemnity the one preparing such claim shall file with this office two (2) copies of preliminary notice to the Insurance Company, two (2) copies of claim for indemnity, two (2) copies of attending physicians report, and two (2) copies of employer's certificate. If these blanks are not available they may be procured from this office upon request.

Please bear in mind that under the instructions of the Director of Highways, no injured employee will be carried on the payroll, but must be compensated under our contract of insurance.

Yours very truly,
HERRN NORTHCUTT.

TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

"**WE** ARE ALL IN IT," said the President the day after bombs dropped on Pearl Harbor. "Every single man, woman and child is a partner in the most tremendous undertaking of our American history." The excerpts below, derived from three papers presented at the 37th annual meeting of the National Tuberculosis Association, indicate the important role played by the medical profession in the victory effort.

CIVILIAN HEALTH IN NATIONAL DEFENSE

The stem from which all manpower springs is the civilian population. The strength of the branch can be no greater than that of the stem. How strong is the stem? The findings of the National Health Survey made in 1935-36 give us some measure.

It may be estimated that 70 million sick persons each year lose over one billion days from work or customary activities and that the cost of illness and premature death in this country amounts annually to about ten billion dollars. The decline in the total death rate has been accomplished largely by live-saving in infancy and childhood, thus allowing larger numbers to reach the age of maturity. Consequently, there is an upward trend in diseases of middle and old age, such as heart disease, nephritis, cancer and diabetes.

More than half of all tuberculosis deaths occur in the age group 15 to 45. This heavy loss comes approximately within the age limits for military service. And for every death there are approxi-

mately 10 clinical cases of illness from tuberculosis.

Disabling conditions among children, dental defects, venereal diseases, pneumonia, malaria and accidents are other leading causes of death and disability. The mental hospitals contain about half a million inmates with 50,000 on parole and about 75,000 patients are in institutions for the feeble-minded and epileptic.

Studies of the economic status of families shows a direct correlation of sickness with low income. Disability due to illness was nearly two and one-half times as great among persons in the income group under \$1,200 (annually) as in the group above \$3,000. When it is recalled that the low income groups constitute a large proportion of those who are employed in industries more or less directly connected with national defense, the losses sustained as a result of unnecessary illness may be regarded in the light of domestic sabotage.

Civilian Health as a Factor in National Defense, K. E. Miller, M.D., *Amer. Rev. of Tuberc.*, Dec., 1941.

EXCLUDING TUBERCULOSIS FROM THE NAVY

Compactness of living spaces aboard a naval vessel is a necessity. Advances in ship construction from the standpoint of ventilation and sanitation in general have been made, but men living aboard are still somewhat crowded. Under such conditions an open case of tuberculosis is a real menace. Medical officers are on the alert, but the average sailor likes to think of himself as a rugged, hardy individual and will not, as a rule, report to the sick bay unless he really feels sick.

No applicant showing any degree of adult type tuberculosis is acceptable. Men in the serv-

ice who develop tuberculosis are retired and are not subject to recall to active duty, even with long standing arrest and minimal lesions.

The medical department of the Navy has recognized that at least 30% to 40% of minimal cases will be missed by well-trained phthisiologists depending upon the conventional methods of physical examination alone. The criterion to be used in weeding out tuberculosis must be radiography. What form of radiography might be most practical for the Navy has been studied for some years. After carefully weighing the ad-

vantages and disadvantages of the several methods now available, fluorography with the 35mm film was found to be the best solution to the problem. Speed is an important factor during a period of mobilization. A smooth working team can easily turn out from 100 to 150 films per hour. At present, examinations are not exceeding the rate of 80 per hour in the interest of careful posturing and some regard for the life of the X-ray tube.

However, these miniature films are not used for fine diagnostic work, but serve merely as a sieve to screen out the abnormal from the normal chest. In any case showing a lesion or even a questionable area, a standard 14 x 17 inch celluloid film is made for confirmation and accurate

diagnosis. The method has definitely passed the experimental stage and it is ideal for mass thoracic survey work. At one training station photo-fluoroscopic examinations of 5,171 recruits were made. These men had already passed two stringent physical examinations. Yet, of these recruits, 15 men showing soft infiltration in the lungs and 3 with multiple calcification and fibrosis of a disqualifying extent were transferred to the hospital for further study and disposition.

The incidence of tuberculosis in the Navy during normal times is not high and has been steadily declining.

Pulmonary Tuberculosis, Its Exclusion from the Navy, Robert E. Duncan, M.D., *Amer. Rev. of Tuber.*, Dec., 1941.

TUBERCULOSIS IN THE ARMY

The author's paper, presented May 8, 1941, was largely a criticism of certain faults in the program for detecting tuberculosis among inductees. By December, 1941, however, he was able to add to the summary the following:

"Since presenting this paper the Army Tuberculosis Survey has been improved. Practically all inductees are now being X-rayed prior to induction into the Army. Tuberculosis inductees are not enrolled. It is considered that the Army now has an excellent program of tuberculosis survey."

The mobilization survey of 1941-45 will be the greatest case-finding effort ever carried out in this country. Its purpose will be to: (1) Detect chest diseases which would render the individual incapacitated for active military service; (2) detect diseases which may be so aggravated by military service that the individual becomes incapacitated for military service; (3) detect, especially, pulmonary tuberculosis with subsequent isolation from contact with young non-infected individuals; (4) report all tuberculous individuals to proper state health authorities.

The demobilization survey will consist of the routine general physical examination followed by an X-ray examination of the chest. Thus far, the X-ray examination has been made shortly after induction, and for this purpose the 14 x 17 inch film has been mostly used. At present and in the future the X-ray survey will be made chiefly by use of fluorograms, using the 4 x 5 inch films. Two films are made, one of which is sent to the War Department for permanent record. Upon demobilization, two additional fluorographic films will be made with like disposition of films.

The chief fault of this plan, namely, that the X-ray film of the chest is usually not made until after induction, has been corrected.

Another fault is that inductees may be discharged to their own care unless in need of hospitalization. Most medical officers will tend to err on the side of safety and many tuberculous inductees will be sent to Army hospitals who should have been discharged to their homes. When viewed from the standpoint of epidemiology, however, this may have the advantage of bringing a large number of cases under control and thus decreasing tuberculosis in the community.

Mobilization regulations allow the induction of an individual with reinfection tuberculosis when the process is minimal as to extent and arrested. This can be done when, in the opinion of the examiner, the lesion is not likely to become reactivated under the conditions of military service. This is a dangerous exception for many experts are able neither to estimate properly the true potentialities of a fibrous, tuberculous process nor the "conditions of military service."

Through this contemplated survey, thousands of new cases will be detected. It is important to plan for their care. No official estimate as to the number that will be discovered has yet been made but the author hazards the guess that between 1941 and 1945, a grand total of 88,000 cases will be detected.

Tuberculosis in the Army, William C. Pollock, M.D., *Amer. Review of Tuber.*, Dec., 1941.

Of particular significance is the fact that four Southern state medical societies, namely Arkansas, Florida, Louisiana and Tennessee, have opened certain of their postgraduate facilities to Negro physicians. * * * The examples which have been set by these state societies should gradually cause other Southern state and county medical societies to open some of their postgraduate activities to Negro physicians.—Opportunities For Postgraduate Study For Negro Practicing Physicians in the South. Paul B. Cornely, J. A. M. A., Feb. 14, 1942.

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PROCUREMENT AND ASSIGNMENT AGENCY

On recommendation of the American Medical Association, the Procurement and Assignment Agency has been set up and is functioning to mobilize the entire medical profession and to assist in the most effective utilization of physicians (dentists and veterinarians as well) in this National Emergency. Members of the Committees on Medical Preparedness of the respective county medical societies in Arkansas have been advised to hold themselves in readiness in order that they may give the Agency immediate co-operation in its mission. Some clearances have been made and many more are in prospect as the need for military medical man-power grows with the expanding armed forces.

Shortly, every physician in the United States will receive a new questionnaire in which he may signify his preference and availability in some service which will be required to win the war. Physicians under 36 years of age who can qualify are especially wanted at this time by the Army and Navy. If the need for medical officers is

not met from physicians in that bracket, physicians under 45 years of age will be called. Attention is directed to the fact that, by selective service registration, Congress has declared all men under 45 available for military service. The military services, however, are hopeful that their needs will be met by volunteers and not through the provisions of the Selective Service System. The new enrollment blank will, therefore, have as its primary purpose the giving of an opportunity to every physician to volunteer for some kind of service in winning the war.

Every effort will be made to keep the medical preparedness committees and the profession informed on the role of the profession in the war. The responsibility of the medical preparedness committees is a serious one. It is upon them that the decision, advisory in character, rests in the determination of the availability of an individual physician for military or other service, "dislocated" from his present civilian status.

Requests for such opinions from the county committees will be forwarded from Washington through the state office. County committees will be asked to advise if the physician is at that time engaged in the ethical practice of medicine and if he can be spared from his usual duties in civilian medical care in his community. The need for prompt reports from county committees is emphasized.

THE AMERICAN WAY

Little Rock, Arkansas
February 17, 1942.

To the Editor:

At a special call meeting of the Pulaski County Medical Society convened for the purpose of discussing medical preparedness, it was unanimously voted that the Society instruct its Committee on Procurement and Assignment service to report any doctor of military age and physically able as available for military service if, and when called. * * * The general attitude of the Society was that we are in a most serious emergency that requires the fullest co-operation and sacrifice on the part of the medical profession as well as other citizens.

Very truly yours,
A. C. Shipp, M. D.
Chairman, Committee on Procurement and Assignment.

PROCEEDINGS OF SOCIETIES

AMERICAN COLLEGE OF SURGEONS ANNOUNCES WAR SESSIONS

The United States Army, the United States Navy, and the United States office of Civilian Defense will co-operate with the American College of Surgeons in a series of meetings during the coming months which will bring within convenient access of physicians, surgeons, and hospital personnel in general throughout the United States, first hand opportunities for information and consultation with respect to their war duties. Surgeon General James C. Magee of the Army, Surgeon General Ross T. McIntire of the Navy, and Dr. George Baehr, Chief Medical Officer of the Office of Civilian Defense, will appoint, and in some instances they have already designated, officers to take active part on behalf of their organizations in one-day meetings, probably thirty in all, which the College will sponsor in places selected so as to permit participation of the medical and hospital professions in every state and the District of Columbia. The program for each meeting will be concentrated on medicine and surgery in military service and in civilian defense. The meetings will be open to the entire medical and hospital profession in the participating states.

Arkansas physicians may conveniently attend as follows:

Wednesday, March 4, Nashville, Tennessee, Andrew Jackson Hotel.

Friday, March 6, St. Louis, Missouri, Jefferson Hotel.

The Army will be represented at the meeting in Nashville by Brigadier General Charles C. Hillman, Chief of Professional Service Division, Office of the Surgeon General. The Navy will be represented by Captain Frederick R. Hook, Chief of the Surgical Service of the United States Naval Hospital in Washington. The United States Office of Civilian Defense will be represented by Dr. Judson D. Dowling in Nashville, and by Dr. John S. Coulter in St. Louis. The Procurement and Assignment Service will be represented by Major Sam F. Seeley, Executive Officer or by a specially appointed delegate.

Among the speakers not in the federal services who will take part in the program in the first area are the following: Dr. Irvin Abell, Dr. R. Griswold, and Dr. Joseph E. Hamilton of Louisville; Dr. George Crile of Cleveland; Dr. George M. Curtis of Columbus; Dr. Evarts A. Graham, Dr. Vilray P. Blair and Dr. James B. Brown of St.

Louis; Dr. Carl E. Badgley, Dr. Frederick A. Collier, and Dr. Max M. Peet of Ann Arbor; Dr. Grover C. Penberthy of Detroit; Dr. Willis D. Gatch of Indianapolis; Dr. Alton Ochsner, Dr. Ambrose L. Storck, and Dr. Michael L. DeBakey of New Orleans; Dr. Frederic A. Besley of Waukegan; Dr. Warren H. Cole, Dr. William R. Cubbins, Dr. Loyal Davis, Dr. Sumner L. Koch and Dr. Dallas B. Phemister of Chicago.

Outline of Program for Members of the Medical Profession

Panel Discussion: Treatment of War Injuries to the Skull and Face.

Panel Discussion: Treatment of War Injuries to the Chest.

The Organization and Functions of the Medical Department of the U. S. Army.

The Organization and Functions of the Medical Department of the U. S. Navy.

The Doctor and the Hospital in Civilian Defense.

Luncheon

Address and Round-table Discussion of Procurement and Assignment Service.

Panel Discussion: Treatment of Wounds of Soft Parts.

Panel Discussion: Prevention and Treatment of Hemorrhage.

Panel Discussion: Fractures.

Dinner

Activities of the American College of Surgeons and Their Relation to the Defense Program.

Panel Discussion: Treatment of Burns.

Panel Discussion: Prevention and Treatment of Shock.

The Jackson County Medical Society has elected the following officers: E. L. Watson, President; G. K. Stephens, Vice-president; J. B. Ivy, Secretary-treasurer; H. O. Walker, Delegate, and G. K. Stephens, Alternate. G. K. Stephens, Tupelo, was selected as director of emergency medical service.

J. B. Ivy, Secretary.

The Dallas County Medical Society has elected the following officers: President, H. A. Cheatham, Princeton; Vice-president, W. P. Ward, Fordyce, and Secretary-treasurer, J. E. M. Taylor, Sparkman.

The Boone County Medical Society has elected the following officers: President, M. E. Rust; Secretary-treasurer, Ross Fowler, and Delegate, J. G. Gladden.

Clay County Medical Society has elected the following officers: President, N. J. Latimer, Corning; Vice-president, O. H. Clopton, Rector; Secretary-treasurer, J. E. McGuire, Piggott; Delegate, O. H. Clopton, and Alternate, W. J. Blackwood, Rector.

The Carroll County Medical Society has elected the following officers: J. H. Bohannon, President; D. C. Roberts, Vice-president; A. L. Carter, Secretary-treasurer; D. K. McCurry, Delegate, and T. A. Boren, Alternate.

Randolph County Medical Society has elected the following officers: President, J. W. Ryburn; Vice-president, J. E. Smith; Secretary-treasurer, M. A. Baltz; Delegate, J. R. Loftis, and Alternate, J. W. Brown.

Lee County Medical Society has elected C. W. Chaffin, Moro, President, and N. C. Hodge, Marianna, Secretary.

The Association of Allergists for Mycological Investigation and the Southwest Allergy Forum will meet at the Albert Pike Hotel, Little Rock, March 5-6th. Among the speakers are Paul Mahoney, Little Rock, "Cooperation Between the Otolaryngologists and the Allergist"; Alan Cazor, Little Rock, "Atopic Dermatitis," and E. P. Cope, Little Rock, "Contact Dermatitis."

The Ouachita County Medical Society met February 5 at the Camden Hospital in dinner session. The following program was given: "The State Health Department and the Present Emergency," W. B. Grayson, Little Rock; "The Sulfonamides," J. N. Compton, Little Rock, and "Importance of Vital Statistics," Myers Smith, Little Rock.

The Greene County Medical Society met February 6th electing the following officers: President, W. E. Ellington; Vice-president, J. J. Hudgins; Secretary-treasurer, W. McD. Lamb; Delegate, R. J. Haley, Jr., and Alternate, Earle D. McKelvey.

Woodrow McD. Lamb, Secretary.

The Sebastian County Medical Society was addressed February 10th by W. C. Vernon, Okmulgee, Oklahoma, on "Injection Treatment of Hemorrhoids."

W. F. Adams, Secretary.

The Craighead-Poinsett County Medical Society was addressed February 5th by H. H. McAdams, "Appendicitis," and R. H. Willett, "Cancer."

The Mississippi County Medical Society was addressed February 3rd by D. H. Anthony, "Diagnosis and Treatment of Acute and Chronic Sinusitis," and Whitman Rowland, "Diagnosis of Angina Pectoris," both of Memphis.

Members of the Nevada County Medical Society were guests of A. S. Buchanan at his country home, "Bucklodge," February 3rd.

The Fifth Councilor District Medical Society has elected the following officers: President, S. A. Thompson, Camden; Vice-president, H. A. Carrington, Magnolia, and Secretary-treasurer, David LeVine, El Dorado.

RANDOM THOUGHTS OF THE SECRETARY

January 28th. This afternoon conferring with the Garland County committees over the coming annual session, finding plans well along and enthusiasm high. Afforded the opportunity to view Louie Martin's collection of elephants with the background of each elephant related by the hobbyist, well worth an entire afternoon. Rowland presents a "sold-out" exhibit space, no small source of satisfaction in a consideration of the meeting expense. Later with Sullivan and Euclid Smith to dinner where Sullivan plays the part of generous and insistent host, making use of Al's coupon book, to its complete discomfiture, we surmise. For the first time, we repeat some random thoughts, originally expressed May 7, 1939: "To barbecue dinner with the Woottons' and the Smiths', a festival which is said to have originated in a remark of ours." In this hectic year of 1942, we continue to remark as we did in 1939.

February 10th. Fay Jones' letter of thanks to the county society is read written, of all things, on a typewriter. We had better kicked in to buy him a handful of typewriter ribbons rather than that pen and pencil set.

February 14th. What with increasing duties and the like, we are permitted an afternoon of relaxation aboard the Southern Belle to Kansas City, indeed a novelty to ride along in comfort with no thought of work ahead.

February 15th. Arriving Chicago, dismal and forlorn this Sunday morning, we attend the National Conference on Medical Service where there is talk of procurement and assignment, civilian defense, rehabilitation and the like to help us keep up with the fast-changing scene of national defense and war. Over 300 physicians are here, each with the thought of ascertaining where and how his state, county and community may better serve this nation in emergency.

PERSONALS AND NEWS ITEMS

J. W. Butts, Helena, and B. H. Hawkins, Mena, have been appointed examiners for the Selective Service.

J. E. Smith, Reyno, has been elected chairman of the State Fish and Game Commission.

John Stathakis, formerly with State Hospital, Little Rock, has accepted a position with the Pine Bluff ordnance plant as resident physician.

Gilbert Dean, Little Rock, has been appointed surgical chief, State Hospital for Nervous Diseases.

S. W. Douglas, Eudora, recently addressed the Spanish-American Veterans at Pine Bluff on "Health of the Aged."

J. H. Burge, Lake Village, has been elected a fellow of the International College of Surgeons.

J. T. Herron, Helena, recently addressed the Barton P. T. A.

Paul L. Day, Little Rock, has been elected chairman of the Council of Social Agencies at Little Rock.

Geo. B. Fletcher, Hot Springs National Park, has been elected chairman of the Board of Directors of the State Hospital for Nervous Diseases.

S. P. McConnell recently addressed the Booneville Rotary club on medical service in war.

Paul Gray, Batesville, has been elected a member of the American Heart Association.

J. K. Thompson recently addressed the Peabody P. T. A. at Fort Smith on "Vitamins."

Ira Ellis, Monette, has been selected as a chairman in the Campaign for Funds to Combat Infantile Paralysis.

Virgil Payne, Pine Bluff, attended the recent session of the American Laryngological, Rhinological and Otological Society held in Saint Louis.

Dr. and Mrs. W. L. Brittain, Conway, spent a recent vacation on the Gulf coast.

W. W. Johnston, Fort Riley, has been promoted to Captain, Medical Corps, United States Army.

C. C. Hanchey, DeQueen, has been called to active duty as Lieutenant, Medical Corps, United States Army, and assigned to Station Hospital, Camp Crowder, Missouri.

W. H. Newkirk, Camp Barkley, Texas, has been promoted to Captain, Medical Corps, United States Army.

J. D. Huskins, Fort Benning, Georgia, has been promoted to Captain, Medical Corps, United States Army.

Ralph E. Crigler has been selected as the "Outstanding Young Man of Fort Smith" for 1941.

Paul Mahoney, Little Rock, addressed the Southern Section Meeting of the American Laryngological, Rhinological and Otological Society at Atlanta, January 23rd, on "Neuralgic Head Pains of Overlooked Dental Origin."

J. B. Elders, Fort Riley, has been promoted to Captain, Medical Corps, United States Army.

C. P. Sisco has been elected a director of the First National Bank at Springdale.

Jack King, Helena, has been called to active service as Lieutenant, Medical Corps, United States Army, and assigned to Reception Center 1772, Jefferson Barracks, Missouri.

Alan Cazort has been elected treasurer of the Pulaski County Medical Society, succeeding R. J. Calcote, now in military service.

During February, L. J. Kosminsky, Texarkana, national president of the Forty and Eight, made addresses at Oklahoma City, Omaha, Springfield, Illinois, Des Moines and Brooklyn.

Elizabeth D. Fletcher, formerly with the Arkansas State Hospital, has opened offices for the practice of psychiatry and neurology in the Donaghey Building, Little Rock.

H. T. Smith, McGehee, has been reelected chief of staff at the Dermott Municipal Hospital.

H. T. Smith, McGehee, has been certified as a Diplomate of the American Board of Internal Medicine.

Ralph E. Crigler, Fort Smith, addressed the Pre-Med Club of the University of Arkansas at Fayetteville February 11th.

H. G. Heller has moved from Mena to Little Rock.

The following have been appointed members of the Medical Milk Commission in Little Rock: Carl A. Rosenbaum, Charles Wallis, John Greuter, Wilfred Parsons and L. L. Fatherree.

Kirk T. Mosely recently addressed the Manila Lions club.

J. J. Hudgins has been appointed a member of the Paragould School board.

MARRIED at Benton, Arkansas, January 17th, Lt. Byron Z. Binns, Camp Benning, Georgia, and Miss Pauline Berry, Monticello.

The following have been appointed medical officers of the Sixth Arkansas Infantry (State Guard); M. B. Bowman, Jack Ellis, Hot Springs National Park, and Edwin Dunaway and R. L. Taylor, Conway.

BORN—A daughter, Ann Sutton, on January 31st, 1942, to Dr. and Mrs. W. F. Adams, Fort Smith.

Lt. R. E. McLochlin, Naval Medical Corps, has been transferred to the U. S. S. Edward Rutledge.

C. H. Lutterloh, Hot Springs National Park, was installed as President of the Mid-South Postgraduate Medical Assembly at the recent Memphis meeting. J. A. Moore, El Dorado, was elected vice-president for Arkansas.

RESOLUTION

Within the month of January, 1942, the Greene County Medical Society lost two of the oldest and most outstanding members. On January 10, 1942, Doctor C. A. Hardesty, of Paragould, Arkansas, died while at work of a heart attack. Doctor Hardesty was a past presi-

dent of the society. On January 17, 1942, Doctor R. W. Cupp, of Marmaduke, Arkansas, passed away following a long illness.

Both Doctor Hardesty and Doctor Cupp spent the greater part of their lives administering to suffering humanity within our state and county. Both gentlemen were outstanding in their profession and were civic leaders in their communities.

Therefore, be it Resolved, that in the passing of these two physicians, the state and local societies have lost two of their most valuable members.

Be it further, Resolved, that the secretary be instructed to enter this resolution on the permanent records of the society and that a copy of this resolution be sent to the families of our departed friends as evidence of our respect and esteem for them, and as a token of our sympathy in their bereavement.

Woodrow McD. Lamb, M. D.
Secretary-treasurer Greene
County Medical Society.

OBITUARY

ALPHONSE FRANCIS PIRNIQUE, age 47, died at his home in Little Rock February 2nd after an illness of nearly one year. Born in Prague, Austria, in 1892, he had been a citizen of the United States for 20 years. In his youth he studied at the Imperial Ballet School in Saint Petersburg, Russia, and toured the world with the Imperial Ballet. While in this country he began the study of medicine and graduated from the Columbia University College of Physicians and Surgeons in 1927. During the World War he served as a lieutenant with the Chemical Warfare Division of the French Army. Following graduation in medicine, he entered practice at New Rochelle, New York, and came to Little Rock in 1930 as instructor in chemistry at the University of Arkansas School of Medicine. At the time of his death he was a part-time instructor at the School of Medicine and a staff member at Baptist State, Saint Vincent's, University and Arkansas Children's Home hospitals. In addition to his memberships in the Pulaski County Medical Society, the Arkansas Medical Society, the Episcopal Church, the Faculty Club of Columbia University, he was a lieutenant-commander in the Naval Medical Reserve Corps. Surviving are his wife and two sons.

WOMAN'S AUXILIARY NEWS

The Sebastian County Medical Society Auxiliary will sponsor several public health relations programs, and later, in co-operation with the committee on cancer control, of which Mrs. S. J. Wolfermann is chairman, will appoint speakers on the subject, according to plans made at the February luncheon of the Auxiliary, February 9th.

Mrs. Charles T. Chamberlain, president of the Auxiliary, read the report of Mrs. T. P. Foltz, chairman of the public health committee, outlining the public health relations program.

Mrs. Walter Eberle and Mrs. W. F. Rose were luncheon hostesses. The luncheon table appointments reflected the approach of Valentine day in red and white decorations. Mrs. Martin Even and Mrs. E. Mendelsohn were guests. Members present in addition to the president and hostesses were Mrs. A. A. Blair, Mrs. J. S. Southard, Mrs. M. E. Foster, Mrs. Everett Moulton, Mrs. S. P. Stubbs, Mrs. Carl Wilson, Mrs. W. J. Nelson, Mrs. J. L. Kellum, Mrs. B. B. Bruce, Alma, Mrs. B. L. Ware, Greenwood, Mrs. C. W. Hall, Greenwood.

Mrs. W. F. Rose,
Publicity Chairman of the Auxiliary of
the Sebastian County Medical Society.

Mrs. William Hibbitts, program chairman for the Woman's Auxiliary to the American Medical Association, conducted a program in the form of a quiz at the January meeting of the Bowie and Miller Medical Auxiliary, Friday afternoon. The meeting was held in the home of Mrs. R. R. Kirkpatrick, 2319 Pecan street, with the following co-hostesses: Mrs. Harry Murry, Mrs. E. M. Watts, Mrs. J. F. Williams, and Mrs. Charles Adna Smith, Jr.

The quiz, entitled, "To Be Informed," was prepared for women's auxiliaries to the American Medical Association to be used throughout the United States. Questions pertained to politics, public relations, the American Medical Association and its auxiliaries. For correct answers, members were awarded prizes from a "grab bag."

Concluding the program, Mrs. Hibbitts talked on "Doctors' Wives and Defense" and read articles from a bulletin of the AMA telling what can be done to aid the country in its expansive program.

Mrs. Ralph Cross, who last week attended the Arkansas state board meeting in Little Rock, gave a general report of activities. Mrs. Roger N. Herbert, of Nashville, Tenn., regional director of the Women's Field Army for Cancer Control, was the principal speaker at the luncheon at the Frederica Hotel. Mrs. W. T. Baum, of Memphis, was also a guest speaker.

Mrs. Euclid Smith of Hot Springs told of plans for the state convention to be held in Hot Springs, April 26-27-28, and urged a good attendance.

Mrs. Cross also announced that Mrs. L. J. Kosminsky has been named new president-elect for the Arkansas Medical Auxiliary, thus giving new honors to the Texarkana organization.

For the social hour, guests were invited to the dining room, where a patriotic motif was achieved in the blue iris, white stock, and red candles, arranged in a colorful centerpiece, flanked by red, white and blue candles. At each end were small groupings of American flags.

Mrs. L. H. Lanier, president, presided at the table from which dainty refreshments in the patriotic tri-color motif were served.

CORRESPONDENCE

February 17, 1942.

To the Editor:

We are writing to you as Editor of your State Journal to invite the members of your Society, especially those living near Memphis, to be present at the 109th annual meeting of the Tennessee State Medical Association. The date is April 14, 15, 16, and the Peabody Hotel is the headquarters.

We will be glad to have any of your members attend just as many sessions as possible. We believe a good program will be offered and we will do our best to make doctors from our neighboring states feel at home at the Tennessee meeting.

I might add that there is no registration fee and that membership in a sister State Association will entitle all visitors to admission to all sessions of the meeting.

Yours very truly,

W. M. Hardy,

Ass't Secretary-Editor.

RESOLUTION

WHEREAS, Dr. Julius Abram Bogart began the practice of medicine in St. Francis County, Arkansas, in the year 1894, and, for a period of 47 years thereafter, he devoted his life in an unselfish and faithful effort to relieve the pain and suffering of his fellow citizens in this community;

WHEREAS, In addition to the practice of his profession, he dedicated his life to the development and improvement of the general welfare of the community thereby earning for himself an enviable reputation as one of this community's most public spirited citizens;

WHEREAS, On November 17, 1941, God, in His infinite mercy, saw fit to take from us this outstanding member of the medical profession and member of this Society at a time when the community can ill-afford to lose his ripe experience, his sound judgment, his wise counsel and his splendid citizenship; and the members of this Society fully appreciate the extent to which the medical profession, which has honored and been honored by him for many years, has lost an outstanding exemplar of its highest, finest and noblest ideals;

WHEREAS, Although he has passed from our midst, he still lives with us in spirit; and the lovable qualities of his life and character will beam

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in our memory like the beautiful stars as long as the memory of those who knew him shall last,

NOW, THEREFORE, BE IT RESOLVED by the St. Francis County Medical Society that we extend to his widow and to the members of his family our deepest sympathy in their great grief; and, as a token of respect, that a copy of this resolution be delivered to the members of his family and public acknowledgment of our great loss be made by publication of this resolution in the newspapers of the county.

N. C. McCOWN, President.

Attest:

J. O. RUSH, Secretary.

BOOK REVIEWS

Synopsis of Preparation and After-Care of Surgical Patients: By Hugh C. Ilgenfritz, A. B., M. D., Instructor in Surgery, Louisiana State University School of Medicine, Visiting Surgeon, Charity Hospital of Louisiana, and Rawley M. Penick, Jr., Ph. B., M. D., F. A. C. S., Professor of Clinical Surgery, Louisiana State University School of Medicine, Visiting Surgeon, Charity Hospital of Louisiana. Illustrated. Price \$5.00. Saint Louis: C. V. Mosby Company, 1941.

This volume presents the generally accepted rules for the optimum preparation and successful aftercare of surgical patients. It also presents the physiological, rational procedures used and gives attention to detail in the use of drugs and solution. The chapter on intestinal obstruction is most complete, outlining diagnosis and supportive measures. In the appendix are listed the dosage, indications and contraindications for the sulfonamide preparations.

Synopsis of Allergy. Harry L. Alexander, A. B., M. D., Professor of Clinical Medicine, Washington University School of Medicine. Pp. 246. 22 illustrations. Price \$3.00. St. Louis: The C. V. Mosby Co., 1941.

The author is in a singularly advantageous position for the preparation of such a book, having been editor of the *Journal of Allergy* since its first issue in 1929. Brevity makes the synopsis readable either to the specialist or the general practitioner. The book has little value as a text for students or for the man doing considerable work in clinical allergy. Its object rather is to serve quickly and briefly men in medical practice who may wish only a superficial knowledge of certain aspects of allergy. It abounds in handy and useful prescriptions, procedures, and tabulated information for quick reference.

Discussion of fundamental, but often boring, evidence to support observations and theories is purposely avoided. Much credence is given to the histamine or "H" substance liberation theory, as the basic reaction producing the wheal on which most clinical allergy depends. The author goes to unnecessary length to debunk the skin test, treating that procedure as a laboratory test which is either positive or negative but of little clinical value. Interpretation of the results of such tests in the light of the clinical experience of the practicing allergist receives little discussion.

The chapter on Bronchial Asthma is an excellent discussion. It alone is worth the price of the book. Sections on various complications and sequelae are particularly good. Real help is here offered to the practitioner in understanding and in treating some of the most difficult problems met in caring for the asthmatic. The chapter on Hay Fever, too, is packed with as much information as is consistent with the author's object of brevity. The discussion of contact dermatitis and atopic dermatitis fails to clear up the confusion which has long existed. The low cost, the brevity, and the quickly available information contained combine to make the book an attractive addition to the physician's library.

The March of Medicine: New York Academy of Medicine Lectures to the Laity, 1941. Pp. 154. Price \$2.00. New York: Columbia University Press, 1941.

In this volume are the essays presented to the public by the New York Academy of Medicine during 1941. The advances in medical progress in different fields are interpreted in a most interesting manner.

Medical Clinics of North America: Military Medicine, November, 1941. Volume 25, Number 6. 418 pages with 50 illustrations. Paper, \$12.00 per Clinic Year. Cloth, \$16.00 per Clinic Year. W. B. Saunders Company, Philadelphia, London.

This volume is written for the information of physicians engaged in the military service or in the selective service and has been prepared by qualified medical officers of the Army and Navy. Among the subjects considered are: "Communicable Diseases and Military Medicine," "Medical Abdominal Emergencies," "Psychiatric Aspects of Military Medicine," "Treatment of Minor War Injuries," "Disorders of the Foot in Relation to Military Service," and others of much interest to the military medical officer.

A Primer on the Prevention of Deformity in Childhood. By Richard Beverly Raney, B. A., M. D., Associate in Orthopedic Surgery, Duke University School of Medicine, in collaboration with Alfred Rives Shands, Jr., B. A., M. D., Medical Director, Alfred I. DuPont Institute of the Nemours Foundation. Pp. 188. Illustrated. Price \$1.00. Elyria, Ohio: National Society for Crippled Children in the United States of America, Inc., 1941.

The Primer on Prevention of Deformity in Childhood is a primer that should be an invaluable addition to the library of general physicians as well as nurses, teachers, and all workers among cripples and potential cripples.

The preliminary chapter on "The Cause of Cripples" is concise and to the point, written so everyone can grasp its meaning.

Chapter II enumerates in simple language all common deformities and the illustrations are most understandable. The same could be said of the lower extremities and the back.

An additional chapter in the next edition, placing special emphasis on prevention of fixed deformity and how to obviate it, would be an addition. Paralysis and deformity will continue, but aside from congenital deformity, a fixed deformity can and should be prevented.

The Primer is all that it should be and the authors are to be congratulated on so valuable a contribution to an important and timely subject.

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THE COUNCIL URGES SUPPORT OF JOURNAL ADVERTISERS

The Blood Bank and the Technique and Therapeutics of Transfusions: By Robert A. Kilduffe, A. B., A. M., M. D., F. A. S. C. P., Director, Laboratories, Atlantic City Hospital; City Bacteriologist, Atlantic City, etc., and Michael DeBaKey, B. S., M. D., F. A. C. S., Assistant Professor of Surgery, School of Medicine, Tulane University of Louisiana, etc. Pp. 558. 214 illustrations and one color plate. Price \$7.50. Saint Louis: C. V. Mosby Company, 1941.

This text, one of the first of its kind, is welcomed to the field as a needed guide for blood banks. In most instances the final evaluation and opinion expressed is from the author's experiences with over 7,000 transfusions. All phases of the blood and plasma in reference to the bank, particularly military aspects of transfusion, are discussed in detail. Special apparatus is shown. There is some repetition but this is far outweighed by the vast amount of information contained in the book. No blood bank can afford to be without the volume.

The Treatment of Infantile Paralysis in the Acute Stage: By Elizabeth Kenny. Pp. 285. Price \$3.50. Minneapolis: Bruce Publishing Company, 1941.

It was my privilege to comment on Elizabeth Kenny's former book, "Infantile Paralysis and Cerebral Diplegia," published in 1937. This new book by Sister Kenny, "The Treatment of Infantile Paralysis in the Acute Stage," gives a new line of thought and is all but revolutionary in the new theories propounded. Whether or not one may or may not be familiar with her book and in the treatments recommended, I feel sure that one should realize that the knowledge and experience set out in this book, all indicate that the Kenny methods are worthy of your consideration.

The treatment outlined, and the methods given, is based on years of experience with a sufficient number of cases to at least warrant its due consideration. The book outlines by descriptions and illustrations, the care of the patient from day to day, the nursing treatment, and the difficulties to overcome, in order to combat the oncoming deformities and to restore function with a lesser degree of possible complications.

The new theory endeavors to impress upon the medical world the fact that spasm and rigidity is an ever-present symptom of the disease, infantile paralysis. Whether one is willing to accept this new theory or not, certainly the book deserves careful thought and consideration. It is a challenge.

Neuroanatomy: By Fred A. Mettler, A. M., M. D., Ph. D., Professor of Anatomy, University of Georgia School of Medicine, Augusta, Georgia. Price \$7.50. Saint Louis: C. V. Mosby Co., 1941.

This volume is a textbook intended to meet the needs of the medical student beginning instruction in neuroanatomy and to prepare him for the demands which will be laid upon him in his clinical training. The first part deals with the gross anatomy of the central nervous system. The second part deals with the microscopic anatomy of the central neural system. Special attention has been given to the matter of terminology. In many instances, terms have been simplified. There are 330 illustrations, 30 of which are in color. These diagrams and illustrations are excellent. All medical students, and those physicians interested in neurology and neuroanatomy, will find this book most instructive and comprehensive.



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No. 11

TROCHANTERIC FRACTURES OF THE FEMUR *

F. WALTER CARRUTHERS, M.D.
Little Rock

The purpose of this paper is to give you a review of 81 cases of fractures of the femur coming under my observation during the past few years, involving the area known as the trochanteric region; and, in addition, to describe more or less in detail the method of management of these cases which, in my experience, has given the best results.

Intertrochanteric fracture of the femur, as the name implies, is a fracture that occurs in that portion of the femur extending from the great trochanter down through and into the lesser trochanter. This fracture should in no way be confused with a fracture of the neck of the femur. The fracture may be simple, but in a majority of the cases, it may be comminuted and occasionally impacted, and, as a result, the fragments are separated and the hip angle distorted in relation to the neck, producing a varying degree of shortening of the limb and in the end a cox vara deformity.

It may be said in passing that intertrochanteric fractures are frequently accompanied by a fracture line running through or down into the subtrochanteric region, longitudinal into the shaft of the femur proper, and also, at times a fracture line may be seen extending into the femoral neck from the trochanteric region proper.

Compound fractures in this region are extremely rare, except in those cases accompanied with extreme injuries following automobile or other unusual accidents. It is almost impossible for a compound fracture to occur in this region because of the protection afforded these parts. Local complications are also uncommon. Frequently the complications encountered are due to the general condition and the age of the pa-

tient. Such complications as cardiac lesions, genito-urinary disturbance and pneumonia of the hypostatic and bronchial types often develop.

A non-union practically never occurs. In fact, I have never seen a non-union of a fracture in this region. It goes without saying that I have seen a number of mal-unions, but never a non-union. This observation is due in all probability to the excellent blood supply to the bone at this point, as all branches of the nutrient arteries of the shaft terminate in and about the trochanteric portion. Furthermore, it goes without saying that the age of the individual seems to have little or nothing to do with the union. It has been my personal observation that in many of the cases: the older the individual the quicker have I seen evidence of early union, to be followed on to a quick and satisfactory bony union. I recall particularly one case in a woman 79 years of age, where the X-ray check-up at the end of four weeks showed a massive new growth about the fracture area. This is certainly in marked contrast to fractures involving the neck of the femur where age is supposed to be a great factor in whether or not union may occur. It has been shown that the period of time necessary for bony union to occur in the trochanteric fracture of the femur in patients from 60 years of age and above is from 6 to 8 weeks.

Although this type of fracture is considered to be serious and has a high mortality, as much as 40% has been reported, this has not been your essayist's experience. On the other hand, to my way of estimating the seriousness of this fracture, in comparing it with fractures that occur about the hip joint, it is indeed a fortunate fracture in spite of its high mortality. For this reason, if for no other, I am sure that not a single one of you present here but who would much prefer to have a trochanteric fracture than to be a victim of a fracture of the neck of the femur anatomically only a few centimeters away. My contention, therefore, is that this type of fracture in the aged, where we know that the majority of

* Read before the Sixty-sixth Annual Session, Arkansas Medical Society, Little Rock, April 15, 1941.

the cases occur in patients 60 years of age or more 75% of which are in the female, in comparing it with the capital fracture of the hip, it is indeed a fortunate fracture.

The mechanism producing an trochanteric fracture as usually related by the patient, states that they either had fallen backward or to one side or the other, striking the trochanteric region directly against some object. In an effort to prevent the fall, they usually hold the thigh in abduction and internal rotation, thus twisting the thigh in such a manner that the direct blow at the end of the fall accounts for the manner in which the fracture occurs, in which the fracture line will be seen extending from the great trochanter down through the lesser trochanter, and sometimes as stated before, producing an impaction, or in some of the cases producing a complete separation of the fragments. The diagnosis of the case, in part, can be made by the history of the patient's account of the fall, and in many instances, they actually hear the cracking noise made when the parts are broken.

Crepitation is usually but not always present. When present, it is due to the fact that the fracture is comminuted. When a patient has slipped and fallen, he certainly has been subjected to the possibility of a fracture and every means at our command should be employed to rule it out. This means, of course, that the patient should be subjected to carefully made roentgenograms. Never subject a patient where such fracture is suspected to undue manipulation and painful examination to determine the presence or absence of the fracture in question. The patient should be carefully handled and taken to the X-ray, letting the X-ray plate reveal to you the kind and type of fracture present. With this examination at hand, you can then best judge what type of treatment may or may not be indicated. A careful survey of the general condition of the individual should be your next objective. This is of extreme importance; because of the age of the patient, the shock that always accompanies this type of injury, the cardio-vascular and urinary complications that may be present, along with the possibility of pulmonary complications to follow. These are certainly not uncommon and may be prevented by careful understanding of the general condition of the patient and by the proper institution of prophylactic treatment as soon as possible after the injury. This prophylactic treatment should be first directed toward the counteraction of the oncoming shock by the administration of an opiate, careful placement of the patient in bed, and proper tem-

porary immobilization, usually in the form of application of a Thomas splint or a simple Buck's extension with sand bags. Personally, I do not recommend the immediate permanent fixation reduction in these cases until a period of the underlying possibility of delayed shock has had time to spend its course. I do, however, always recommend the application of some kind of traction as mentioned above to be applied immediately, then a careful summing up of all the general conditions of the individual can be carefully weighed and the type of treatment which may be best suited can then be decided upon.

General anesthesia in patients of this type is to be avoided whenever possible. The treatment planned should be to give the shortest bed confinement with the least restriction of motion should be carried out. The apparatus to be used should be applied to give comfort to the patient, permit them to resume a sitting position, and in many instances to be more or less ambulatory. Allow early massage and motion to the involved parts.

Treatment based on these recommendations has been applied as a routine in all trochanteric fractures coming under my supervision. The advantage of this method enables you to effect a more perfect immobilization and at the same time give to the patient all the comforts that one should expect under such conditions.

Open operation is seldom resorted to. However, in a few selected cases, in which the cortex of the bone is such that will permit the introduction of foreign material, and in cases where there has been very little if any comminution of the great trochanteric area, the introduction of a vitallium screw or Moore nail can be used advantageously.

The patient receiving a trochanteric fracture of the femur who survives the shock of the injury, and barring other constitutional complications, will usually recover with a minimum loss of function and more satisfactory and rapid recovery than any other type of fracture involving any other part of the femur.

With the possibility of a non-union out of the question, the prognosis in trochanteric fractures is more than good. The most likelihood of deformity is the presence of coxa-vara deformity at the hip, and a possibility always of some shortening; but where proper traction with proper reduction and fixation are employed neither one of these conditions should exist.

To state emphatically that a patient with a trochanteric fracture should recover without any

permanent functional loss or disability would be indeed an error, as nearly all have some permanent limitation of motion of the hip joint, and most notable, limited abduction at the hip.

The question of impairment of function of the knee presents a mean factor. I always warn the patient that they will have more trouble with their knee than they will with the hip.

Where proper reduction and fixation has been accomplished early, sufficient amount of callus will usually occur at the site of the fracture and even in those cases that have not been completely immobilized, will repair themselves to a point where mobilization of the knee can be released within four to six weeks, and early massage and motion in the form of physiotherapy can be instituted to prevent the impairment expected in the knee.

Prognosis seems then, to depend, for the most part, upon the protection given the patient's general condition, the method of treatment used, along with the avoidance of a general anesthetic, and early mobilization of the joints and carefully supervised post-operative treatment throughout which will insure for you a well and satisfied patient. The treatment of the fracture itself is most important.

I have yet to see a non-union in any of the trochanteric fractures whether it be the true type as described by Watson-Jones, or the peritrochanteric, or intertrochanteric, types as mentioned by other authors.

In reviewing our cases, we find that we have not used a Thornton plate as advocated by Dr. Thornton. We have successfully used the Roger Anderson well leg splint in a large series of our cases. In six of our open reductions, we have seen fit to use a long vitallium screw in three cases and in the other 3 used the Austin Moore nails. These cases as mentioned above were the selected cases that we felt these methods were indicated, and could be used successfully. In one case, we inserted a long wood type of screw made of vitallium with excellent result. In 6 cases Smith-Petersen nails were used and in two of these cases, with much regret, in that during the insertion of the nails through the great trochanter, it split in two. I mention this only to call to your attention "that it can happen here." The other 4 cases showed excellent results. In all the remaining cases of this series, they were treated by means of the Thomason double leg plaster cast method.

The Russell traction method means long hospitalization, high cost of medical care, and along with this the same can be said for the Thomas splint with Pearson attachment and over-head frame. These latter methods have their merits and can be very satisfactorily used in those cases where the patient necessarily has to be confined to the hospital and where the question of expense and medical cost may not be a factor. The Whitman method of a double spica cast, so far as my method of treatment is concerned, has been regulated to the dump heap, as there are many methods far superior and I mention it only to condemn it.

Conclusions

1. The mortality in this type of fracture is exceedingly high, due to the general condition of the patients receiving this type of fracture and to improper treatment.
2. A type of semi-ambulatory treatment is the method of choice.
3. In the majority of cases internal fixation in certain selected cases facilitates the handling and adds greatly to the comfort of the patient and helps to reduce over-head medical cost and care.

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ANNOUNCEMENT

Registration April 27th

Members required to register under provisions of the Selective Service Act on April 27th are advised to register with their Local Boards in advance of the annual session. For those members who find this impractical, arrangements have been made with Local Board "A," Garland County, to maintain a registration booth in the Arlington Hotel on April 27th.

WHAT CAN WE DO FOR THE PATIENT WITH ARTHRITIS? *

LEON E. KING, M. D.

Hot Springs National Park

Perhaps it will come as a surprise to some of us here to learn that rheumatism in its various manifestations is today the most common chronic disease in the United States. From a survey conducted by the United States Public Health Service, it has been estimated that there are more than six million persons in this country who are afflicted with some form of rheumatic disease, a number greater than all cases of heart disease, carcinomas and other tumors, tuberculosis, and diabetes combined. To those of us who have been holding to the belief that rheumatism is essentially an affliction of persons past middle age or of advanced years, it will be interesting to note that more than 50% of persons afflicted were found by this survey to be under 45 years of age. These rheumatic diseases ranked second in producing both temporary and permanent disability; resulted in the permanent invalidism of 147,000 persons; and accounted for the loss of 97 million work days. The fact that this group of diseases ranked first in its incidence and fourteenth as the cause of death from chronic disease carries with it far-reaching medical and social-economic implications.

It has also been estimated that between 25% to 35% of all cases of rheumatism presenting themselves for treatment may be placed in the category of atrophic or rheumatoid arthritis, the form most likely to strike, cripple, deform and disable the younger age groups, and the one which presents the most difficulties in its control and treatment. The prevalence and seriousness of this form of arthritis has led some authorities to refer to it not merely as a disease, but as a scourge, and it is with this scourge that we are now going to concern ourselves.

Atrophic or rheumatoid arthritis has been defined as a generalized, systemic disease with joint manifestations, which is most commonly seen in a chronic form, but which may also occur in acute and subacute forms, and, not infrequently, in combination of these forms in the same individual. The person afflicted is not just "sick in his joints," but is "sick all over." This is evident even from a cursory examination of the typical case. The patient appears ill, haggard, anemic, malnourished and tired. The pulse

is often accelerated, and the blood pressure low. At times there is a low-grade fever. The skin is loose and wrinkled over the body due to rapid weight loss and muscle atrophy, while over the affected joints it is thin, atrophic, dry and reddened. The hands and feet feel cold and clammy and appear cyanotic. The chest is depressed and the abdomen atonic and protruding. The patient generally shows emotional instability and nervous strain. Aside from the joint pathology, then, there is in this disease a pronounced disturbance of the various physiological processes relating to the neuro-circulatory, gastro-intestinal, endocrine, and nervous systems. It is obvious from these facts that much of our therapeutic effort to control this disease must be directed towards the correction of the disturbed physiological processes incident to it. This becomes even more obvious when one considers that any discussion of the treatment of atrophic arthritis must take into account two unfortunate facts: First, that we have not as yet, found any single, specific, causative agent of this disease, although many contributing factors, such as a certain constitutional make-up, infection, exposure, fatigue, nervous and mental strain seem to play important predisposing roles; second, that we do not yet possess a single drug, preparation, or method, which, when used alone, will act specifically in the cure of this disease. Hence, any rational program for the care of the arthritic must be based upon broad and fundamental principles with the aim of alleviating pain and discomfort; allaying fear and anxiety; eradicating definite, active foci of infection, if present; restoring, as far as it is possible, of normal function of the various systems affected; and of promoting and stimulating general body defense.

Needless to say, before any therapeutic program is undertaken, it is essential that the patient receive a complete physical and laboratory investigation. The latter should include the count of the red and white blood cells, a differential count of the white cells, a hemoglobin determination, an estimation of the sedimentation rate of the red blood cells, a urinalysis, a determination of the blood uric acid, and a gastric analysis. Under certain conditions, such as when potentially toxic drugs are used, it is also desirable to follow the icterus index, and the blood platelets. X-ray films of some of the affected joints are not only valuable for diagnosis but also for a follow-up of progress of the disease, or its response to treatment. The therapeutic

* Read before the Sixty-sixth Annual Session, Arkansas Medical Society, Little Rock, April 15, 1941.

tic regimen may now be considered under the following heads:

1. Rest.
2. Relief of pain.
3. Removal of definite foci of infection.
4. Maintenance of adequate nutrition.
5. Improvement of systemic functions.
6. Physiotherapy and spa therapy.
7. So called "specific" or "near-specific" therapy.
8. Orthopedic care.

Rest: This is probably the most important single weapon in combatting the disease. Rest must be both physical and mental, systemic as well as local. Except in the more acute and febrile forms of the disease, rest does not mean complete confinement to bed, but consists of adequate periods of physical and mental relaxation alternating with periods of activity and exercise, the extent of which must be gauged by the severity of involvement, and the general condition and endurance of the patient. Over-exercise and fatigue must be carefully avoided. Mental relaxation is promoted by allaying fear and anxiety, and by frequent encouragement. Rest of the affected joints is accomplished by keeping them immobilized in position of muscular relaxation. Splints and splint casts frequently serve this purpose well.

Relief of Pain: As far as it is possible, relief of pain should be attempted without resorting to analgesic drugs. Rest, judicious application of heat in some form, and gentle massage of the soft tissues between the affected joints to overcome muscle spasm are in themselves powerful anodynes. When analgesic drugs must be resorted to, the salicylates group still seems to be most useful, and at times may be combined with small doses of codeine and/or mild sedatives.

Removal of Definite Foci of Infection: The medical profession in general, and students of arthritis in particular, are today far less enthusiastic about the removal of so-called foci of infection for the cure of this disease as they were some years ago. This probably is a natural reaction to a procedure which undoubtedly was greatly abused and employed indiscriminately, and which fell far short of its original expectations. The pendulum may have swung too far in the opposite direction today. There is still much speculation and argument concerning the exact role which foci of infection play in the causation of atrophic arthritis, but few authorities would be content to let an obvious focus of infection remain untreated. The treatment, however,

would lean toward conservatism, and radical measures employed only when the general condition of the patient shows that he can withstand them without detriment.

Maintenance of Adequate Nutrition: The patient with arthritis, like many sufferers from other chronic systemic ailments, is apt to be malnourished, underweight, and show signs of multiple deficiencies. His diet, therefore, should be of the high-calorie, high-vitamin type, with an optimum amount of proteins. If dietary restrictions are deemed necessary they should be made at the expense of concentrated carbohydrates, such as pies, pastries, candies, cookies, etc. In order to insure adequate amounts of vitamins, crude or concentrated forms of these substances are administered, in addition to those already present in the food. Cases presenting severe degrees of anemia are greatly benefited by several small volume blood transfusions; while those showing moderate anemia require iron, or liver-iron preparations. Not infrequently a gastric analysis will reveal an achlorhydria or a hypochlorhydria, along with a deficiency of secretion of gastric enzymes. In these cases, the administration of dilute hydrochloric acid during meals along with digestive extracts of the gastric mucosa not only aids digestion, but also promotes the utilization of inorganic iron. The sense of chronic fatigue and muscular weakness so often present are at times benefited by feedings of gelatin or glycine.

Improvement of Systemic Functions: The disturbance of the neuro-circulatory mechanism is most effectively treated by physical agents. These will be discussed under physiotherapy. Improved gastro-intestinal function should be accomplished through regulation of the diet, attention to regularity of bowel elimination, and through the betterment of the general physical status of the patient. The vitamin B complex serves usefully in promoting the appetite, increasing gastro-intestinal tone, promoting the utilization of foods, and helping elimination. When laxatives are prescribed they should be of the mild-action type, serving their purpose without purgation.

Physiotherapy and Spa Therapy: These two forms of treatment are so intimately related that they may be discussed together. Both seek to utilize physical agents to promote relief and/or cure, and, as such, aside from rest, form the most valuable weapons available for control of this disease. Heat, light, climate, water, massage, exercise, and electricity, all are em-

ployed in numerous ways with the aim of influencing favorably the pronouncely-disturbed physiological processes of the organism. A course of treatment carried out in a well-regulated, properly-supervised health resort or spa, under guidance of competent and experienced physicians carries with it numerous advantages. Under such a regimen the change of environment, regularity of habits, pleasantness of scenery and climate, and the exact adherence of the patient to the medical program which has been outlined to him by the spa physician, go far in the rehabilitation of the chronic arthritic. Moreover, the patient's spirits are raised, his courage and faith are fortified, and his hope of overcoming his handicap increased, by the sight of so many other people with ailments similar to his own deriving benefit from such a program.

So-called "Specific" Therapy: From time to time, numerous preparations have been offered to the medical profession as specifics or near-specifics for the cure of atrophic and other types of arthritis. These substances comprise a great variety, not unlike the famous "Heinz 57." Some of these are chemicals such as gold salts, sulfur, and arsenicals; others are biologicals, such as vaccines, bee venom, and so-called foreign proteins; while still others belong to the category of highly concentrated vitamins. Most of the panaceas offered have been found worthless and have been discarded; some preparations are still widely used; and a few, very few, in more recent studies in carefully selected cases have shown a degree of promise, but their exact status as "specifics" has not yet been definitely established. In the employment of so-called specifics in the treatment of arthritis, one will do well to familiarize himself with the limitations, and to guard himself against possible dangers, incident to this form of therapy. The dangers are mainly three: First, the use of potentially toxic drugs may result in severe reactions, some of which may even prove fatal; second, the employment of vaccines either in improper dosage or at the wrong time in relation to the activity of the disease, may do irreparable damage to the patient; and third, in relying on the so-called specific as an absolute cure for the disease rather than utilizing it merely as an adjunct to a well-rounded program, the physician may be lulled into a false sense of security from which he may be awakened rather rudely when he realizes that the results have fallen far short of expectations.

Orthopedic Care: Orthopedic appliances and procedures are highly useful in the prevention

and correction of joint deformities resulting from arthritis. Proper splinting of the affected parts will go far toward control of deformities and contractures. In selected cases, surgical procedures have restored joints to useful function.

In conclusion, I should like to emphasize the following points:

1. The medical profession as a whole must recognize the prevalence and the seriousness of chronic arthritis, especially that of the atrophic or rheumatoid type.
2. The physician must learn to differentiate the various forms of rheumatism in order to select the proper treatment.
3. An intense interest over a prolonged period of time, in each case of arthritis, is essential for the best therapeutic results.
4. Much research is needed in an attempt to uncover the specific causative agents of this disease, with the hope that this will lead to more satisfactory methods for its control and cure.

COMMUNIQUE

Induction Station, Ft. Snelling, Minn.,
January 11, 1942.

To the Editor:

Greetings and felicitations from the frozen North. 26 below zero last week, but everyone agrees it is a very mild winter. At least, when compared with last winter, so I'm glad I was in God's country then. However, we have no kicks as they've treated us mighty nice up here. Since the war officially started, we work every day including Sundays and holidays, and nearly every evening.

Please convey my thanks to the state society for the 1942 free membership. And also to the county society for the Christmas telegram. When I owe you some dues for my county membership, please notify me, as I've sorta lost track of such things.

Heard that Amis, Krock, Stocker and young Hoge are now in the service. Please complete the list when you write, if there are others. Have been wondering especially about Whitaker, Foltz, Adams, Chamberlain, Pride, Crigler, Wilson, and young Foster. Guess you old heads will have to rule the roost for a long time.

Time to quit—best regards to all my friends down there.

As always,

Charley Finney.

TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

THE gap between proven knowledge and effective action based on that knowledge, is nowhere more glaring than in our fumbling efforts at control of the most common of the infectious diseases.

We know that the time lost from the common cold would build hundreds of the planes we now need so much. Yet, the simple prophylactic measure of isolating all those colds in early stages is applied routinely to a few school children only.

This failure to coordinate knowledge and action is also all too common in our efforts to control and eradicate tuberculosis.

TUBERCULOSIS IS FOUND WHEN LOOKED FOR

That tuberculosis can be found and is most easily cured in the stage before symptoms appear is an axiom that has grown trite with repetition, yet the great majority of people fail to translate this into the action which will safeguard themselves and their families from this disease.

But what are the facts? In four years the deaths from tuberculosis surpass the number of those killed in all the wars the United States has ever fought. If the losses of one year from tuberculosis could be attributed to enemy action, the nation would be shocked with grief and vow vengeance at any cost. Yet, the slow undramatic dribbling away of lives goes on, day by day, though proof has been added to proof that this can be stopped.

For an example, take a look at our colleges and universities. Into their doors every Fall go hundreds of thousands of American youth, those favored ones of earth from whose ranks will come most of the trained men and women of our society. Yet, tuberculosis has already laid its hand upon many of these. During 1939-40, 637 cases of tuberculosis were found in 248 of these institutions with a total enrollment of 500,000 students, because it was looked for. Most of these infected students can be saved for useful, productive lives with a minimum of time lost.

What is the story where the college authorities report that no search is made? Only 35 cases appeared in 227 institutions among 200,000 students during the same period, is the answer.

But is that the whole story? No, for back of those 35 cases many more stand in shadowed ranks, already touched by the destroyer. It is easy to prove that tuberculosis is there—a tuberculin test, followed by an X-ray of positive reactors is the magic wand that will bring to light the hidden lesions. But when they are not found early we know the story too. Most of them will progress to the stage where treatment is to be reckoned in years, and complete cure is the exception.

The illustration here shown is based on the 1939-40 report of the Tuberculosis Committee of the American Student Health Association which was compiled from data received in response to a questionnaire which they sent to colleges and universities throughout the country. The 1940-41 report of the Committee changes it but little.

And what of the 402 institutions whose administrators did not even reply to the questionnaire? We can only surmise that they, too, have failed to translate the thing they know into the thing they do. Some of them, perhaps, are even unaware that tuberculosis is now, as it has always been, a foe of youth.

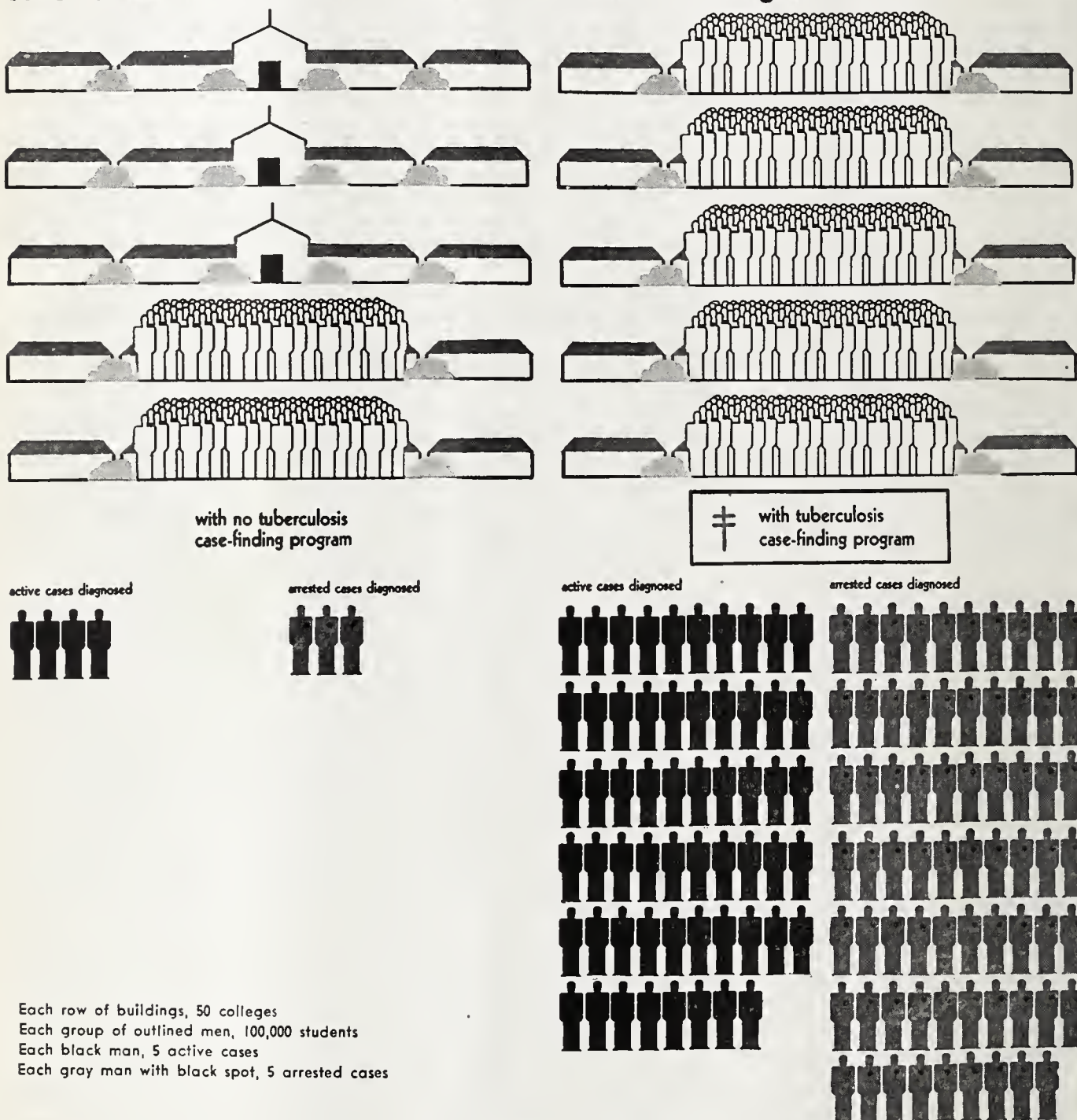
Yet, it is to the pursuit of knowledge that all these institutions are dedicated, and it was many years ago that Ralph Waldo Emerson said, "Education is not pouring knowledge into minds; it is not erudition. A person is not truly educated unless knowledge influences his **doing** as well as his **thinking**. Insofar as learning alters and directs **behavior** it is education."

In this respect, unfortunately, educators follow but the common path. In the trade union, the insurance office and the department store, in the hospitals and the homes for the aged, wherever men and women are gathered together, tuberculosis may be found when looked for. No class is

exempt, no land is free from it—it is an enemy power we know how to conquer, but the war is prolonged by "too little and too late."

Based on reports of the Tuberculosis Committee of the American Student Health Association, Charles E. Lyght, M. D., Chairman, and published in the *Journal-Lancet*.

Tuberculosis is Found When Looked For in American Colleges



CORRESPONDENCE

February 20, 1942.

To the Editor:

Please express my appreciation to the Arkansas Medical Society for their thoughtfulness and generosity.

I feel sure the medical profession, as a whole, and the Army Medical group, with all its civilian physicians, will, in this coming crisis, justify the esteem in which we place it.

Capt. E. C. Gay,
Station Hospital,
Ft. Leonard Wood, Mo.

The President's Page

Dear Doctors:

I wish to extend my cordial greetings to the doctors of the Arkansas Medical Society and to the women of the Medical Auxiliary, and to remind you of the Annual Meeting of our organizations April 27, 28, and 29, at the Arlington Hotel in Hot Springs.

In spite of the fact that our country is at war, and troublesome times face us, we feel that it will serve the best interests of our profession for us to carry on to the best of our ability. There is no substitution for the joys and stimulation of meeting with our fellow practitioners, and it is especially important for us to keep the flame of scientific research and exchange of knowledge burning at this time, for only in the New World is such now possible. Every one of us owes it to himself to attend our State Meeting.

The Garland County Medical Society is host on this occasion, and these doctors enjoy an enviable reputation for their hospitality and entertainment. The President of the Society, Dr. Louie Martin, and his committees, are sparing no effort to provide a delightful time for us in their city. There will be special entertainment features for the women and golf for the men.

The scientific program is in keeping with the programs held in the past by our Society. Dr. H. King Wade, Chairman of the Program Committee, has arranged to bring to us the latest in surgery, medicine, and medical problems, presented by outstanding men from our own ranks and from other states. The discussions will offer splendid opportunity for us to come in direct contact with the speaker and ask questions which might aid with personal cases we may have.

The scientific exhibits will be instructive and interesting. Those of you who have scientific exhibits and have not already done so, please write Dr. A. G. Sullivan, Hot Springs, who will make arrangements to give you the space you desire.

While the main purpose of our State Medical Society is the dissemination of scientific and medical knowledge, we cannot discount the value of the fellowship enjoyed at these meetings. The opportunity to exchange ideas, to visit with each other about medical cases and medical problems, old contacts renewed and new ones made, new ideas received, and stimulated thinking, are but a few of the rewards you will receive; and by attending the meeting you might help someone.

I hope to see all of you in Hot Springs. It is possible that for many of us this will be the last State Meeting until after the war. We won't be able to attend many medical meetings during 1942. The wartime economy of the Nation will, no doubt, keep us close to our community. Many more of our colleagues will have been called to the colors before the next year has passed, and additional burdens will be placed on those of us who remain at home. It is because we may not have the opportunity of all meeting again soon that I particularly urge each of you to attend this State Meeting.

To those who have not already done so, make your plans NOW to be in Hot Springs on the 27, 28, and 29. Let us renew old acquaintances once more.

Sincerely yours,
H. FAY H. JONES, President
Arkansas Medical Society

THE JOURNAL

OF THE

ARKANSAS MEDICAL SOCIETY

Owned by the Arkansas Medical Society and Published
under direction of the Council

W. R. BROOKSHER, M. D., Editor
610 First National Bank Bldg. Fort Smith, Arkansas

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THE ANNUAL SESSION

This issue contains the preliminary program and announcements of the 67th Annual Session of the Arkansas Medical Society to be held at the Arlington Hotel, Hot Springs National Park, April 27th, 28th and 29th. The annual session is the principal scientific activity of the Society and its business session combined. It is important that members attend if they are to be informed of the activities of their organization and of the aims and accomplishments of organized medicine in general. Decisions of the Society in annual session are binding on the membership and it is most desirable that all county societies be represented by a full delegation. The scientific program is one of much promise and offers postgraduate instruction in the ever-advancing field of medicine. Physicians owe a duty to themselves and to their patients to be well-informed of these advances and of the newer methods in scientific practice. Lastly, the annual meetings of the Society afford the opportunity of greeting old friends and of making new ones, of a bit of relaxation which is a need of all of us in these times of stress.

Plan to be in Hot Springs, April 27-28-29th.

OUR DOLLARS MUST FIGHT

Not every man in our profession is called upon to serve the armed forces. But we shall follow our professional duty in caring for the civilian forces of the Nation. In addition, we are a part of the united civilian army which provides the money, the sinews of war.

A part of the money to meet the cost of the war will be obtained from taxes. A part will be secured by borrowing from banks and other lending agencies. But there must be more than this, and the remainder must come directly from the people. The Government is not asking for gifts from individuals but for loans through the purchase of Defense Bonds and Stamps.

There are three series of Defense Savings Bonds, known as E, F, and G. Bonds of these series are registered bonds, issued in the name of the owner, and payable only to him. Consequently they cannot be sold, or used as security for a loan. Defense Stamps range in price from 10c to \$5.00. They are negotiable and do not bear interest, but when as much as \$18.75 has been invested in them, they can be turned in for a bond.

Series E Bonds are the, "People's Bonds." They may be purchased only by individuals and may be obtained at any post office and almost any bank. A bond may be registered in the names of one or two individuals, or, in the name of one person with a second listed as beneficiary. The smallest of the People's Bonds costs \$18.75 and pays \$25 at maturity—a 33 1/3 per cent increase in value. The largest of this series costs \$750 and pays \$1,000 at the end of 10 years.

Series F Bonds, like Series E, are appreciation bonds, but Series F Bonds may be purchased by groups and associations as well as individuals. The cost of a Series F Bond is 74 per cent of the face value of the bond and the Government pays the full face value amount at the end of the 12-year maturity period. The smallest bond of this series costs \$18.50 and pays \$25 at maturity—the largest costs \$7,400 and pays \$10,000.

Unlike the Series E and F Bonds, the Series G Bonds cost the same as their face value and pay interest semi-annually at the rate of 2 1/2 per cent. The G Bonds are issued in denominations of \$100 to \$10,000. The F and G Bonds may be purchased only from Federal Reserve Banks and the Treasury Department but most commercial banks will take applications for them.

We have faith in America. We have faith in our ability to unite our resources to bring success to our Nation's all-out fight for Victory.

DISABILITY INSURANCE AND HOSPITALIZATION PAYMENTS

The following editorial, because it deals with a matter of importance relating to possible current legislation, has been especially authorized and approved by the Board of Trustees of the American Medical Association.

In his budget message to the second session of the Seventy-seventh Congress, January 7, President Roosevelt recommended "an increase in the coverage of old-age and survivors' insurance, addition of permanent and temporary disability payments, and hospitalization payments beyond the present benefit programs, and liberalization and expansion of unemployment compensation in a uniform national system." On January 20, 1942, a communication from the President was sent to the House of Representatives requesting \$300,000,000 for "extended unemployment compensation benefits." This recommendation apparently is not related to the proposed disability and hospitalization payments, but refers only to problems of unemployment occasioned by the changing of industrial plants from the production of peacetime goods to the production of war materials. Officially, this is the status of a recommendation thrown by the President recently into the whirlpool of public opinion. The discussion of the problem is agitating leaders in the fields of prepayment plans for medical care and hospitalization, hospital management and medical practice.

Various conferences in Washington with representatives of the Social Security Board yield the impression that the proposal of the President involves primarily a plan to increase taxation under the Social Security Act by one per cent, of which five-tenths per cent is to be paid by the worker and five-tenths per cent by the employer, with a view to providing every insured worker or his dependents during periods of hospitalization with the sum of three dollars a day. The plan would involve also allowances in cash to cover disability equal to the present allowances for unemployment during periods of sickness. This proposal apparently had its origin in the report of the Technical Committee on Medical Care, which introduced the so-called National Health Program in the National Health Conference in Washington in 1938. At that time the House of Delegates of the American Medical Association held a special session to give consideration to the national health program. The Reference Committee on Consideration of the National Health Program in a report adopted by the House of Delegates said:

Your committee approves the principles of hospital service insurance which is being widely adopted throughout the country. It is susceptible of great expansion along sound lines, and your committee particularly recommends it as a community project. Experience in the operation of hospital service insurance or group hospitalization plans has demonstrated that these plans should confine themselves to provision of hospital facilities and should not include any type of medical care.

The committee also said:

In addition to insurance for hospitalization your committee believes it is practicable to develop cash indemnity insurance plans to cover, in whole or in part, the costs of emergency or prolonged illness. Agencies set up to provide such insurance should comply with state statutes and regulations to insure their soundness and financial responsibility and have the approval of the county and state medical societies under which they operate.

Your committee is not willing to foster any system of compulsory health insurance. . . .

Considering particularly the question of insurance against loss of wages during sickness, the report of the committee said:

In essence, the recommendation deals with compensation of loss of wages during sickness. Your committee unreservedly endorses this principle, as it has distinct influence toward recovery and tends to reduce permanent disability. It is, however, in the interest of good medical care that the attending physician be relieved of the duty of certification of illness and of recovery, which function should be performed by a qualified medical employee of the disbursing agency.

Following the meeting of the House of Delegates in 1938 came the recommendations of the Interdepartmental Committee to Coordinate Health and Welfare Activities. This group recommended the development of social insurance to insure partial replacement of wages during temporary or permanent disability. Senator Robert Wagner of New York, in the well-known proposed National Health Act, S. 1620, and in subsequent proposed legislation, also endeavored to include plans for disability compensation and indeed to provide medical service in addition to compensation.

In numerous addresses and in hearings before legislative bodies since 1938, Mr. Arthur J. Altmeyer, chairman of the Social Security Board, has continued frequently to suggest cash benefits to persons unemployed because of sickness and the provision of constructive social services to supplement cash aids, including medical care. Obviously, every proposal for expansion of the social security program must, therefore, be viewed in the light of the ultimate goal set by Mr. Altmeyer. Even though the House of Delegates of the American Medical Association apparently approved unreservedly the principle of cash benefits for those sustaining loss of wages

because of sickness, the provision of cash payments of three dollars a day to the worker who is hospitalized must be considered as part of a movement toward complete plans for compulsory sickness insurance on either a cash or a medical service basis. As evidence of the apparent inseparability between disability benefits and medical and hospital care, workmen's compensation acts, under which an injured worker is supplied with cash benefits for disability and also with necessary medical and hospital care, are cited.

The new proposals of the President, apparently emanating from the Social Security Board, must not be viewed in the light of circumstances as they prevailed in 1938, but in the light of conditions as they exist today. The intervening period has witnessed an extraordinary expansion in voluntary hospitalization insurance and in so-called medical service plans. Today some fifteen million persons are insured against the costs of hospitalization in a variety of agencies, including private insurance corporations, mutual nonprofit plans like the Associated Hospital Service of New York, and hospitalization plans set up on a nonprofit basis in various states. At least fourteen states and numerous counties have developed voluntary plans to cover the costs of medical care. An extensive experimentation is now in progress which should lead ultimately, if not too greatly disturbed, to the development of procedures distinctly American in their characteristics and wholly capable of meeting the needs for medical and hospital service. These are likely to be adapted to the American system of government rather than modeled after those plans of medical care and hospitalization which have prevailed in foreign countries, and which have been developed under concepts that are socialistic, communistic, or totalitarian rather than democratic.

The Annual Report of the Social Security Board for 1940 indicates that that agency contemplates nothing short of a complete system of compulsory sickness insurance. Thus the report states:

Studies of illness and disability as a cause of economic insecurity were continued during the year, and consideration was given to proposals for extending the social security system to include the risk of ill-health and disability.

Moreover, there are indications that the Social Security Board has been much concerned with the question

whether the development of a program of medical care in connection with the three assistance programs under

the Social Security Act would assist or hamper the development of a broader program of medical care for those groups in our population who are not now able to obtain needed services.

In fact, Mr. Arthur J. Altmeyer stated his point of view positively to the Congress when he said in July, 1941:

Our eventual goal should be the establishment of a well-rounded system of social insurance to provide at least a minimum security to individuals and their families due to unemployment, sickness, disability, old age, and death. In addition, we must provide a series of constructive social services to supplement the cash aids provided under social insurance. Medical care should be available to individuals and their families so that we may build a healthier, happier nation. Such a system of medical care would be instrumental in reducing the costs of cash payments for sickness and disability.

From these statements it is clear that the goal of the Social Security Board is definitely a nationwide system of compulsory sickness insurance. Obviously, then, every proposal for expansion of social security must be considered in its relation to that goal.

Specifically, nevertheless, the present proposal is for the payment of three dollars for each day the worker is hospitalized. This blunt statement without qualification must, of course, be translated into proposed legislation before all its implications can be fathomed. The proponents of voluntary hospitalization and medical service plans have felt that the enactment of such legislation would sound the death knell of their voluntary proposals. Even they, however, are not of one mind in their approach to the problem. Indeed, some have indicated that they might not look askance on the proposal if the technic concerned would involve payment of the cash benefit directly to such plans rather than directly to the insured patient. This would mean recognition by the government of the prepayment plans as the official agency in the field of hospitalization and medical care. Representatives of medical and hospital service plans definitely propose that the Federal Security Administrator issue a complete endorsement of such existing prepayment plans and that he urge all communities to form similar organizations. Such a pronouncement would be premature. Most of these plans are still largely experimental; they cover, for the majority of the insured, only hospitalization and surgical fees. Few of these plans have yet secured much more than a slight majority approval of either the medical profession or the public which they would serve. Many questions as to the cost of promotion and maintenance and the character of the control of voluntary hospitalization and

medical care plans remain unanswered. These were no doubt some of the considerations which caused the House of Delegates of the American Medical Association, at its 1941 session, to request the Bureau of Medical Economics to make a comparative study of medical service plans for submission to the House of Delegates in 1942. Until voluntary efforts have shown themselves incapable of meeting existing needs, they should be encouraged rather than discouraged or even destroyed by forms of government competition or intervention. By contrast government plans are costly to administer and inefficient in operation; they are even more experimental than the voluntary plans, and they function on such a huge scale as to make relief from them wellnigh impossible once they are established.

Consideration of the proposed three dollars per diem payment for hospitalization costs for workers and their dependents must depend, therefore, first on the merits of the proposal itself and second on its relation to the proposed goal of a complete compulsory sickness insurance plan. Among the important objections to the three dollars per diem payment plan is the fact that the contribution would cover only a portion of the cost of necessary hospital care as defined in most of the voluntary hospitalization plans. The establishment by the government of a fixed price per day for hospital services would inevitably tend here, as always in the past, to cause deterioration of such service to meet the fixed price. Workers would feel, no doubt, that the payment of a three dollars fee was the government's evaluation of what proper hospital service should cost. While the fee might be nearly adequate in rural areas, it would, of course, be wholly inadequate in urban centers.

The voluntary hospitals of the United States now provide an essential service to the American people. These hospitals have grown as a community interest; many of them are founded in that tenet of most religions which states that the care of the sick is one of the highest moral functions that mankind can fulfill. Federal payment and control of hospitalization costs would destroy local, religious, and private community interest in the maintenance of voluntary hospitals, thus jeopardizing their future and inhibiting the initiative to assist them. The proposal involves, as one may observe from the statements of representatives of the Social Security Board, increased federal funds for new hospital construction. Already such appropriations as the government has made have tended to freeze the flow of bequests

and donations for nonprofit hospitals. With these concepts in mind, representatives of various organizations in the field of the hospital are emphasizing in this critical time that the voluntary hospitals are a national asset of incalculable value, that their efficiency is traceable in large part to their freedom of action under local control and that proposed legislation should have most careful consideration from the professional and hospital point of view before it is offered to the Congress.

The American people find themselves today in the midst of a war which, this time, is in all truth a war for the salvation of democracy. Unless that war is won, such "social gains" as may have been secured will disappear along with the fundamental freedoms which prevail only under a democratic system of government. Those fundamental freedoms are more vital to the nation than any expansion of public services, or the engraftment on the body politic of new systems of payment for work, or improvement in the manner of living, or security developed by enforced savings through compulsory insurance. The American people are not averse to immense sacrifice—even to the ultimate sacrifice—if it will win the war. They should not be compelled, in the midst of such sacrifice, to consider radical proposals for changing the whole system of American living in health or in illness. The proposed expansions of the Social Security Act related to medical care should be considered in times when they can be given that type of deliberate, meticulous consideration which carefully weighs every aspect of the problem concerned. Such proposals should not be submitted to the Congress and to the people in a period fraught with anxiety as to whether or not the nation itself will survive. Let us at least postpone these proposals until the decision as to whether or not our democracy can successfully defend itself against ruthless totalitarianism is clear.—Journal of American Medical Association.

COMING MEDICAL MEETINGS

Second Councilor District Medical Society, Searcy, April 13th, 6:30 P. M.

The Second American Congress on Obstetrics and Gynecology, Saint Louis, April 6th-10th, 1942.

Arkansas Medical Society, Hot Springs National Park, April 27th-29th, 1942.

American Medical Association, Atlantic City, June 8th-12th, 1942.

"WAR OR NO WAR"

Depression or no depression, in good times and in bad," Mead Johnson & Company are keeping the faith with the medical profession. Mead Products are not advertised to the public. If you approve this policy, please specify **Mead's**.

Preliminary Program and Announcements

OF THE

SIXTY-SEVENTH ANNUAL SESSION OF THE

ARKANSAS MEDICAL SOCIETY

HOT SPRINGS NATIONAL PARK

APRIL 27, 28, 29, 1942

HEADQUARTERS—ARLINGTON HOTEL

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COUNCILORS AND COUNCILOR DISTRICTS

Euclid M. Smith, Hot Springs National Park, Chairman.
 F. A. Corn, Jr., Lonoke, Secretary.

FIRST DISTRICT—Clay, Crittenden, Craighead, Greene, Lawrence, Mississippi, Poinsett and Randolph counties. Councilor, F. H. Jones, Piggott. Term of office expires 1943.

SECOND DISTRICT—Cleburne, Fulton, Independence, Izard, Jackson, Sharp, Stone and White counties. Councilor, L. T. Evans, Batesville. Term of office expires 1942.

THIRD DISTRICT—Arkansas, Cross, Lee, Monroe, Phillips, Prairie, St. Francis and Woodruff counties. Councilor, J. O. Rush, Forrest City. Term of office expires 1943.

FOURTH DISTRICT—Ashley, Bradley, Chicot, Cleveland, Desha, Drew, Jefferson and Lincoln counties. Councilor, S. W. Douglas, Eudora. Term of office expires 1942.

FIFTH DISTRICT—Calhoun, Columbia, Dallas, Lafayette, Ouachita and Union counties. Councilor, B. L. Moore, El Dorado. Term of office expires 1943.

SIXTH DISTRICT—Hempstead, Howard, Little River, Miller, Nevada, Pike, Polk and Sevier counties. Councilor, H. E. Murry, Texarkana. Term of office expires 1942.

SEVENTH DISTRICT—Clark, Garland, Hot Spring, Montgomery and Saline counties. Councilor, Euclid M. Smith, Hot Springs National Park. Term of office expires 1943.

EIGHTH DISTRICT—Conway, Faulkner, Grant, Lonoke, Perry, Pope, Pulaski, Van Buren and Yell counties. Councilor, F. A. Corn, Jr., Lonoke. Term of office expires 1942.

NINTH DISTRICT—Baxter, Boone, Carroll, Marion, Newton and Searcy counties. Councilor, J. F. John, Eureka Springs. Term of office expires 1943.

TENTH DISTRICT—Benton, Crawford, Franklin, Johnson, Logan, Madison, Sebastian, Scott and Washington counties. Councilor, Clyde McNeil, Rogers. Term of office expires 1942.

STANDING COMMITTEES

(Appointments expire with annual session of the year indicated.)

SCIENTIFIC WORK—H. King Wade, Hot Springs National Park, Chairman (1944); R. B. Robins, Camden (1942); Euclid M. Smith, Hot Springs National Park (1943); W. R. Brooksher, Fort Smith (ex-officio).

MEDICAL LEGISLATION—Jos. F. Shuffield, Little Rock, Chairman (1943); C. W. Dixon, Gould (1943); †Stanley M. Gates, Monticello (1943); Euclid M. Smith, Hot Springs National Park (1942); S. J. Wolfermann, Fort Smith (1944); M. L. Norwood, Lockesburg (1944).

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MEDICAL EDUCATION AND HOSPITALS—M. J. Kilbury, Little Rock, Chairman (1944); S. J. Allbright, Searcy (1942); †J. W. Amis, Fort Smith (1943); O. W. Clark, Pine Bluff (1944).

PUBLIC RELATIONS—W. T. Wootton, Hot Springs National Park, Chairman (1942); H. A. Rands, Dumas (1943); J. M. Kolb, Clarksville (1944).

MEDICAL ECONOMICS—C. E. Dungan, Augusta, Chairman (1942); †J. H. Hellums, Dumas; J. B. Hesterly, Prescott (1942); Thomas Wilson, Wynne (1944); A. F. Hoge, Fort Smith (1942); Paul Mahoney, Little Rock (1942).

SCIENTIFIC EXHIBIT—Sam Phillips, Little Rock, Chairman (1943); G. G. Woods, Huntington (1942); A. G. Sullivan, Hot Springs National Park (1944); W. C. Langston, Little Rock (1944); W. Decker Smith, Texarkana (1944).

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Stell, Hot Springs National Park (1942); Jeff Baggett, Prairie Grove (1942); Glenn Johnson, Little Rock (1944).

SPECIAL COMMITTEES

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POSTGRADUATE STUDY—D. A. Rhinehart, Little Rock, Chairman; Jos. F. Shuffield, Little Rock, Secretary; B. E. Barlow, Dermott; J. P. Clemens, Stephens; M. C. Hawkins, Jr., Searcy; J. S. Wilson, Monticello; Rufus Martin, Warren; J. H. Burge, Lake Village; C. S. Holt, Fort Smith; H. W. Hundling, Little Rock; L. J. Kosminsky, Texarkana; Earle H. Hunt, Clarksville; A. G. Sullivan, Hot Springs National Park; R. W. Miller, Fayetteville; Virgil Payne, Pine Bluff; C. A. Churchill, Batesville; E. A. Bing, Marshall; M. A. Baltz, Pocahontas; R. C. Dickinson, Horatio; J. B. Wharton, Jr., El Dorado.

AUXILIARY—J. J. Monfort, Batesville, Chairman; E. C. Moulton, Fort Smith; M. L. Dalton, Brinkley; R. L. Taylor, Conway; T. Duel Brown, Little Rock; W. M. Parker, DeVall's Bluff; Carl A. Rosenbaum, Little Rock.

STUDY OF MIDWIFERY—J. B. Jameson, Camden, Chairman; Roy Millard, Russellville; B. J. Reaves, Little Rock; J. M. Lemons, Pine Bluff; E. A. Callahan, Carlisle.

LIASON WITH ARKANSAS TUBERCULOSIS ASSOCIATION—A. C. Shipp, Little Rock, Chairman; †Harvey Shipp, Little Rock; S. C. Fulmer, Little Rock; J. D. Riley, State Sanatorium; W. P. Ward, Fordyce; W. H. Bruce, Pine Bluff.

INDUSTRIAL HEALTH—E. E. Barlow, Dermott; S. J. Allbright, Searcy; Fred W. Harris, Little Rock; J. Donald Hayes, Little Rock; M. E. Foster, Fort Smith; S. A. Drennan, Stuttgart.

MENTAL HYGIENE—Geo. B. Fletcher, Hot Springs National Park, Chairman; A. C. Kolb, Little Rock; N. T. Hollis, Little Rock; Elizabeth Fletcher, Little Rock.

HISTORY OF THE ARKANSAS MEDICAL SOCIETY—Frank Vinsonhaler, Little Rock, Chairman; M. L. Norwood, Lockesburg; E. F. Ellis, Fayetteville; Robert Caldwell, Little Rock; W. T. Wootton, Hot Springs National Park; H. Moulton, Fort Smith; J. M. Lemons, Pine Bluff; E. E. Barlow, Dermott; D. A. Rhinehart, Little Rock; W. H. Mock, Prairie Grove; L. J. Kosminsky, Texarkana; F. O. Mahony, El Dorado; M. E. McCaskill, Little Rock; Geo. B. Fletcher, Hot Springs National Park; O. J. T. Johnston, Batesville; S. J. Wolfermann, Fort Smith; A. S. Buchanan, Prescott; T. H. Smith, McGehee.

† In military service.

* Deceased.

LOCAL COMMITTEES

Garland County Medical Society

Louie G. Martin, General Chairman

GENERAL COMMITTEE—J. S. Stell, Chairman; W. E. Gray, Driver Rowland, G. A. Hebert, Geo. B. Fletcher.

ENTERTAINMENT—G. A. Hebert, Chairman; W. T. Wootton, F. S. Tarleton, C. E. Garratt, Euclid M. Smith, Chas. Lutterloh.

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SCIENTIFIC EXHIBITS—A. G. Sullivan, Chairman; J. H. Chestnutt, Foster Jarrell, L. E. King.

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RECEPTION—W. F. Porter, Chairman; D. B. Stough, D. C. Lee, F. S. Tarleton.

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MEMORIAL SERVICES—J. M. Proctor, Chairman; O. H. King.

OFFICERS—GARLAND COUNTY MEDICAL SOCIETY—1942

LOUIE G. MARTIN, President.

F. S. TARLETON, Vice-President.

W. E. GRAY, Secretary-Treasurer.

ANNOUNCEMENTS

REGISTRATION

The registration desk will be located in the lobby of the Arlington Hotel and will be open from 8:00 A. M. to 5:00 P. M., April 27th and 28th. The desk will also be open Sunday afternoon, April 26th, from 3:00 to 5:00 P. M. and April 29th, from 8:00 A. M. to 1:30 P. M. Delegates are requested to register as early as possible, presenting credentials at the time of registration. Members and visitors are also requested to register and receive the official badge and program. Admission to all sessions will be by badge. Bring your 1942 membership card to facilitate registration. Members of the American Medical Association from any state may register as guests.

MEETINGS OF THE COUNCIL

The Council of the Arkansas Medical Society, including the Past-Presidents, will meet at noon each day in private dining room immediately following the adjournment session.

PAST-PRESIDENTS' BREAKFAST

The Past-Presidents of the Society will convene in annual breakfast session Wednesday, April 29th, at 7:30 A. M.

GOLF

Tournament play for the H. King Wade trophy will be held at the Hot Springs Country Club, April 28th and 29. In addition to this trophy, several other prizes have been provided. Further announcements will be made during the session.

PROGRAM

HOUSE OF DELEGATES

First Meeting, Arlington Hotel, April 27th, 9:00 a. m.

Meeting called to Order by H. Fay H. Jones, President.
Calling Roll of Delegates.

Report of Credentials Committee.

Introduction of Fraternal Delegates.

Adoption of Minutes of the Sixty-sixth Annual Session as published in the June, 1941, issue of The Journal of the Arkansas Medical Society.

Appointment of Reference Committee.

President's Address to the House of Delegates.

REPORT OF COMMITTEES

SCIENTIFIC WORK—H. King Wade, Chairman.

MEDICAL LEGISLATION—Jos. F. Shuffield, Chairman.

HEALTH AND PUBLIC INSTRUCTION—W. B. Grayson, Chairman.

MEDICAL EDUCATION AND HOSPITALS—M. J. Kilbury, Chairman.

PUBLIC RELATIONS—W. T. Wootton, Chairman.

MEDICAL ECONOMICS—C. E. Dungan, Chairman.

SCIENTIFIC EXHIBIT—Sam Phillips, Chairman.

NECROLOGY—W. A. Snodgrass, Chairman.

CANCER CONTROL—Vincent O. Lesh, Chairman.

HEART—A. A. Gilbert, Chairman.

STUDY OF MIDWIFERY—J. B. Jameson, Chairman.

MATERNAL WELFARE—S. A. Thompson, Chairman.

POSTGRADUATE STUDY—D. A. Rhinehart, Chairman.

AUXILIARY—J. J. Monfort, Chairman.

CONTROL OF SYPHILIS—D. W. Goldstein, Chairman.

HISTORY OF ARKANSAS MEDICAL SOCIETY—Frank Vinsonhaler, Chairman.

LIAISON WITH ARKANSAS TUBERCULOSIS ASSOCIATION—A. C. Shipp, Chairman.

INDUSTRIAL HEALTH—E. E. Barlow, Chairman.

MENTAL HYGIENE—Geo. B. Fletcher, Chairman.

REPORT OF THE STATE MEDICAL BOARD OF THE ARKANSAS MEDICAL SOCIETY—D. L. Owens, Secretary.

REPORT OF DELEGATE TO THE AMERICAN MEDICAL ASSOCIATION—E. E. Barlow.

REPORT OF THE COUNCIL—Euclid M. Smith.

REPORT OF THE TREASURER—R. J. Calcote.

REPORT OF THE SECRETARY—W. R. Brooksher.

REPORT OF COUNSEL—Hon. Peter A. Deisch.

REPORT OF FRATERNAL DELEGATES.

NEW BUSINESS.

The following amendment to the Constitution and By-Laws of the Society was proposed at the annual session of 1941, and has been published in the November, 1941, and JANUARY, 1942, issues of The Journal:

ARTICLE VI

To amend the first sentence which now reads: "The Council shall consist of the Councilors, and the President and Secretary, ex-officio."

To read:

"The Council shall consist of the Councilors, the President, the Secretary, the President-Elect and the Treasurer."

Section of the Nominating Committee.

SCIENTIFIC SESSION

MONDAY AFTERNOON, APRIL 27TH, 1:30 P. M.

CALLING THE SOCIETY TO ORDER—H. Fay H. Jones, President.

INVOCATION—Rev. Homer T. Fort, First Methodist Church.

ADDRESS OF WELCOME—Hon. Leo P. McLaughlin Mayor, Hot Springs National Park.

ADDRESS OF WELCOME ON BEHALF OF THE GARLAND COUNTY MEDICAL SOCIETY—Louie G. Martin, President.

RESPONSE FOR THE ARKANSAS MEDICAL SOCIETY—H. E. Murry, Texarkana.

PRESIDENT'S ADDRESS—H. Fay H. Jones, Little Rock.

"The Problem of Cerebral Palsy and Its Relation to Rehabilitation and Public Health"—W. M. Phelps, Baltimore.

"The Importance of Spas in Military and Civilian Defense Program"—Walter S. McClellan, Saratoga Springs, New York.

"National Physician's Committee for the Extension of Medical Service"—Mr. John M. Pratt, Executive Administrator, Chicago.

"Lymphogranuloma Venereum"—L. B. Massey, Osceola.

PUBLIC MEETING

The annual public meeting will be held in the Arlington Hotel at 8:00 P. M., Monday, April 27th. The final program will give full details.

MEMORIAL SESSION

First Presbyterian Church

TUESDAY, APRIL 28TH, 8:30 A. M.

CALLING MEETING TO ORDER—H. Fay H. Jones, President, Arkansas Medical Society.

INVOCATION—Rev. Homer T. Fort, First Methodist Church.

MUSIC.

READING OF NAMES OF DECEASED MEMBERS OF THE AUXILIARY—Mrs. E. L. Thompson, Hot Springs National Park.

ADDRESS—W. H. Mock, Prairie Grove.

MUSIC.

BENEDICTION—Dr. Olin McKindrey Jones, First Presbyterian Church.

IN MEMORIAM

Simeon J. Hesterly, Prescott, May 2, 1941.
 Stephen S. Jones, Calico Rock, May 7, 1941.
 John Cicero Hughes, Hoxie, May 13, 1941.
 Aaron A. McKelvey, Van Buren, May 21, 1941.
 John R. May, Little Rock, June 5, 1941.
 James Meek Sheppard, El Dorado, June 9, 1941.
 John Jefferson Johnson, Harrison, June 26, 1941.
 Sidney Harris, Herbine, July 28, 1941.
 Hugh E. Longino, Texarkana, September 2, 1941.
 Wylie R. Holloway, Center Ridge, September 11, 1941.
 Earnest Burnette, Hattiesville, September 13, 1941.
 Nathaniel S. Word, Camden, October 9, 1941.
 John Dana Robbins, Mount Ida, October 29, 1941.
 William A. Kriesel, Little Rock, October 30, 1941.
 Julius Abram Bogart, Forrest City, November 17, 1941.
 Ernest LaFayette Handley, Pocahontas, December 9, 1941.
 James Anderson Burks, Benton, December 20, 1941.
 Clinton Amos Hardesty, Paragould, January 10, 1942.
 Ernest H. Harris, Coy, January 15, 1942.
 Robert Wakeman Cupp, Marmaduke, January 17, 1942.
 Alphonse Francis Pirnique, Little Rock, February 2, 1942.
 Benjamin Edward Hendrix, Gillham, March 15, 1942.

SCIENTIFIC SESSION

Arlington Hotel

TUESDAY, APRIL 28TH, 9:30 A. M.

"Clinical Manifestations of Prostatic Disease with Special Reference to Their Treatment by Transurethral Resection"—Charles Paddock, Fayetteville.
 "Goldblatt Kidney"—Joe McMartin, Omaha.
 "Contact Dermatitis"—Alan G. Cazort, Little Rock.
 "An Analysis of Results of Thoracic Surgery at the University of Arkansas School of Medicine and Hospital"—J. K. Donaldson, Little Rock.
 "Pruritis Ani"—Ralph E. Crigler, Fort Smith.

SECTION ON OPHTHALMOLOGY AND OTOLARYNGOLOGY

Arlington Hotel

TUESDAY, APRIL 28TH, 9:30 A. M.

CHAIRMAN—Raymond Cook, Little Rock.
 SECRETARY—K. W. Cosgrove, Little Rock.
 CHAIRMAN'S ADDRESS—Raymond Cook, Little Rock.
 "Local Sulfathiazole in Sinusitis"—John Smith, Little Rock.
 "Pitfalls in Ophthalmic Surgery"—Lawrence Post, Saint Louis.
 A luncheon with round-table discussion will follow.

SCIENTIFIC SESSION

TUESDAY, APRIL 28TH, 2:00 P. M.

"The Etiology and Treatment of Traumatic Shock"—C. M. Wilhelmj, Omaha.
 "Phytobezoar: Report of a Case"—A. F. Hoge, Fort Smith.
 "Anisiekonia"—Lawrence Post, Saint Louis.

JOINT SESSION WITH THE ARKANSAS TUBERCULOSIS ASSOCIATION

A. C. Shipp, Little Rock, President, Arkansas Tuberculosis Association; President, Southern Tuberculosis Conference, Presiding.

J. D. Riley, M. D., Superintendent, Arkansas Tuberculosis Sanatorium, Introducing
 H. Frank Carman, Dallas—"The General Management of Tuberculosis in the Home"
 H. Lee Fuller, Director, Division of Tuberculosis Control, Arkansas State Board of Health, Little Rock—"Finding Tuberculosis"
 Motion Picture Film—"Artificial Pneumothorax in the Treatment of Tuberculosis."

ENTERTAINMENT

TUESDAY EVENING, APRIL 28TH, 7:00 P. M.

The Garland County Medical Society will entertain with a banquet and dance. Details will be announced in the final program.

SCIENTIFIC SESSION

WEDNESDAY, APRIL 29TH, 9:00 A. M.

"Hypertension: Newer Theories, Prognosis and Treatment"—J. N. Compton, Little Rock.
 "Is Prescription Writing Becoming a Lost Art?"—Mr. Herbert Parker, Arkansas Pharmaceutical Association, Jonesboro.
 "The Surgical Problem of Perforating Peptic Ulcer"—M. B. Bowman, Hot Springs National Park.
 "Sex Hormones: Physiology, Diagnosis, Therapy"—D. K. Kitchen, Detroit.

HOUSE OF DELEGATES

WEDNESDAY, APRIL 29TH, 1:30 P. M.

CALLING THE MEETING TO ORDER—H. Fay H. Jones, President.

ROLL CALL.

REPORT OF NOMINATING COMMITTEE.

ELECTION OF OFFICERS.

President-Elect.

First Vice-President.

Second Vice-President.

Third Vice-President.

Treasurer.

Secretary.

Five Councilors.

Delegate to the American Medical Association.

Alternate to the American Medical Association.

REPORT OF THE REFERENCE COMMITTEE.

REPORT OF COMMITTEES.

NEW BUSINESS.

ADJOURNMENT.

FINAL GENERAL SESSION

WEDNESDAY, APRIL 29TH

(Immediately after adjournment of the House of Delegates)

CALLING THE MEETING TO ORDER—H. Fay H. Jones, President.

UNFINISHED BUSINESS.

PRESENTATION OF PRESIDENT R. B. ROBINS.

PRESENTATION OF THE PRESIDENT-ELECT.

NEW BUSINESS.

SELECTION OF PLACE OF NEXT MEETING.

ADJOURNMENT SINE DIE.

PROCEEDINGS OF SOCIETIES

Howard-Pike County Medical Society has elected the following officers: President, J. S. Roberts; Secretary-treasurer, W. M. Gibson, and Executive Secretary, H. H. Holt.

As Chairman of Organization of the Woman's Auxiliary to the Arkansas Medical Society, I wish to call your attention to the fact that it is not possible to organize an Auxiliary except upon an invitation extended by the County or District Medical Society.

(Mrs. Chas. W.) Evelyn T. Dixon,
Chairman, Organization,
Woman's Auxiliary to the
Arkansas Medical Society.

The Woodruff County Medical Society has elected the following officers: President, J. W. Morris; Vice-president, F. C. Maguire; Secretary-treasurer, C. E. Dungan; Delegate, C. E. Dungan, and Alternate, F. C. Maguire.

Arkansas County Medical Society has elected the following officers: President, T. S. Van Duyn, Stuttgart; Vice-president, Arthur Fowler, Humphrey; Secretary-treasurer, M. C. John, Jr., Stuttgart; Delegate, R. H. Whitehead, DeWitt, and Alternate, C. A. Lumsden, DeWitt.

The Lawrence County Medical Society was addressed at Walnut Ridge February 19th by Jos. F. Shuffield, Little Rock, on "Infantile Paralysis and Congenital Deformities."

Chas. D. Tibbels, Secretary.

The Pulaski County Medical Society was addressed March 9th by W. C. Langston, "Early Placental Development."

T. Duel Brown, Secretary.

The Crawford County Medical Society was addressed recently by C. E. Bayan, Mountainburg, on "The Psychiatry of Patients."

The Sebastian County Medical Society was addressed March 10th by O. C. Melson, Little Rock, on "Treatment of Hypertension."

W. F. Adams, Secretary.

The Ouachita County Medical Society met in regular monthly dinner session at the Camden Hospital March 5th. The following program was rendered: "Splenomegaly," Fred Harris, and "Colles' Fracture," Joe Shuffield, both speakers of Little Rock.

R. B. Robins, Secretary.

Saline County Medical Society has elected the following officers: President, Dewell Gann, Sr.; Secretary-Treasurer, C. W. Jones, and Delegate, C. W. Buffington.

The Lafayette County Medical Society has elected the following officers: President, F. E. Baker, Stamps; Secretary-Treasurer, A. W. Keith, Stamps; Delegate, R. L. Armstrong, and Alternate, A. W. Keith.

The Benton County Medical Society met in dinner session at Rogers, March 12th, for the following program: "Allergy in General Practice," Drs. Haas and Erickson, and "Practical Application of Smith-Peterson Nail in Fractures of the Femur" (motion picture), Herbert Smith, all speakers of Pittsburg, Kansas.

M. W. Chastain, Secretary.

The Benton County Medical Society has elected the following officers: President, J. S. Thompson, Gravette; Vice-president, L. O. Greene, Pea Ridge; Secretary-treasurer, M. W. Chastain, Bentonville; Delegate, Geo. M. Love, Rogers, and Alternate, M. W. Chastain.

The Pulaski County Medical Society was addressed March 20th by George T. Pack, New York, on "The Diagnosis and Treatment of Cancer of the Stomach."

T. Duel Brown, Secretary.

The Columbia County Medical Society met in dinner session at Magnolia, March 12th, for the following program: "The Future of Medicine," H. Fay H. Jones, Little Rock; "Coronary Artery Disease," S. C. Fulmer, Little Rock; "Fracture of the Wrist," Jos. F. Shuffield, Little Rock, and "Future Plans for the Arkansas Medical Society," R. B. Robins, Camden. After the scientific program the society was entertained at Club Longino by Luther Longino.

J. H. Wilson, Secretary.

PERSONALS AND NEWS ITEMS

J. H. McCurry, Cash, has recovered from an operation performed on February 6th.

R. B. Robins, Camden, recently took special work at Cook County Hospital, Chicago.

Hoyt R. Allen, Little Rock, attended the recent meeting of the Midwest Proctological Society in Kansas City.

Capt. L. M. Henry, formerly stationed at the Meridian Air Base, Meridian, Mississippi, has been transferred to the 125th Observation Squadron, Fort Sill, Oklahoma.

Capt. John M. Samuel, Little Rock, is now on duty with the 68th Field Artillery, Fort Knox, Kentucky.

V. D. McAdams, Cord, has been elected president of the school directors and teachers of Independence County.

C. S. Pool, formerly director of the Ashley County Health Unit has been transferred to the Hot Spring County Unit at Malvern.

R. H. Willett, Jonesboro, spent a recent vacation in Florida.

T. P. Foltz, Fort Smith, has recovered from an operation.

Alan Cazort, Little Rock, has been elected Secretary-Treasurer of the Southwest Allergy Forum.

MARRIED—On March 10th, Ben H. Pride and Miss Margaret Ann Hurley, of Fort Smith.

The February 26th issue of the Booneville Democrat was dedicated to J. D. Riley, State Sanatorium, in appreciation of his services.

C. H. Reagan, formerly of Marked Tree, has been promoted to Major, Medical Corps, United States Army. Major Reagan is now stationed on the Pacific coast.

BORN—On February 22nd, a son, to Dr. and Mrs. W. J. Butt, Fayetteville.

C. E. Etheridge has been elected a director of the Morrilton Rotary Club.

J. M. Walls, Blytheville, has been called to active duty as Lieutenant, Army Medical Corps, and assigned at Camp Robinson.

Paul C. Eschweiler, Little Rock, recently addressed the Rotary Club of that city on "Diet in Natural Health."

J. D. Riley, State Sanatorium, addressed the Booneville Methodist Men's Club recently on "What It Takes to Make a Good Citizen."

L. L. Fatherree, Little Rock, recently addressed the Business and Professional Women's Club of that city on "Health in Defense."

The Arkansas Society, Sons of the American Revolution, has elected the following officers: President, C. H. Dickerson, Conway; Frank Vinsonhaler, Little Rock, trustee.

Lt. Comdr. C. M. Wassell, Naval Medical Corps, formerly of Little Rock, has been awarded the Navy Cross for heroism in evacuation of wounded from Java.

A. H. Hudgins has moved from Searcy to Jonesboro where he will be located in the Medical Arts Clinic.

P. W. Lutterloh, Jonesboro, recently addressed District No. 1, Arkansas State Nurses' Association.

Capt. Wm. B. Harrell, Medical Corps, United States Army, is now located at the 218th General Hospital, Fort Amador, Canal Zone.

L. M. Henry, Fort Smith, now stationed at Fort Sill, Oklahoma, has been promoted to Major, Medical Corps, United States Army.

M. E. Blanton, Jonesboro, has been called to active duty with the army medical corps and stationed at Fort Sam Houston, Texas.

E. R. Barrett, Jonesboro, has been appointed to the naval medical corps and assigned to duty at a Pacific coast station.

MARRIED—At Camp Polk, Louisiana, March 20th, Lt. S. B. Thompson, formerly of Camden, and Miss Ilene Haan, Cadillac, Michigan.

W. B. Prothro, formerly health director at Arkadelphia, is now located with the City-County Health Unit, El Paso, Texas.

PRELIMINARY PROGRAM

EIGHTEENTH ANNUAL SESSION

WOMAN'S AUXILIARY

TO THE

ARKKANSAS MEDICAL SOCIETY HOT SPRINGS

APRIL 27, 28, 29, 1942

HEADQUARTERS—ARLINGTON HOTEL

HONOR GUESTS

Mrs. R. E. Mosiman, Seattle, Washington, President, Woman's Auxiliary to the American Medical Association.

Mrs. Frank Haggard, San Antonio, Texas, President-Elect, Woman's Auxiliary to the American Medical Association.

Mrs. J. U. Reaves, Mobile, Alabama, President, Woman's Auxiliary to the Southern Medical Association.

OFFICERS

PRESIDENT—Mrs. Calvin Churchill, Batesville.
PRESIDENT-ELECT—Mrs. L. G. Fincher, El Dorado.
FIRST VICE-PRESIDENT—Mrs. C. W. Dixon, Gould.
SECOND VICE-PRESIDENT—Mrs. Fred Hames, Pine Bluff.
THIRD VICE-PRESIDENT—Mrs. J. B. Jameson, Camden.
FOURTH VICE-PRESIDENT—Mrs. H. T. Smith, McGehee.
HISTORIAN—Mrs. C. W. Garrison, Little Rock.
PARLIAMENTARIAN—Mrs. C. H. Lutterloh, Hot Springs.
SECRETARY—Mrs. Finis Q. Wyatt, Batesville.
TREASURER—Mrs. Fount Richardson, Fayetteville.
PUBLICITY SECRETARY—Mrs. Ralph Cross, Texarkana.

ADVISORY BOARD

Dr. J. J. Monfort, Chairman, Batesville.
Dr. E. C. Moulton, Ft. Smith.
Dr. M. L. Dalton, Brinkley.
Dr. R. L. Taylor, Conway.
Dr. T. Duel Brown, Little Rock.
Dr. W. M. Parker, DeValls Bluff.
Dr. C. A. Rosenbaum, Little Rock.

COUNCILORS

Mrs. J. T. McLain, Gurdon.
Mrs. C. W. Jones, Benton.
Mrs. J. B. Crawford, Little Rock.
Mrs. C. E. Kitchens, DeQueen.
Mrs. Alfred Hathcock, Fayetteville.

COUNCILWOMAN TO THE WOMAN'S AUXILIARY
TO THE SOUTHERN MEDICAL ASSOCIATION—Mrs.
William R. Brooksher, Ft. Smith.

COMMITTEE CHAIRMEN

1941-1942

ORGANIZATION—Mrs. C. W. Dixon, Gould.
EDUCATION AND PUBLIC HEALTH—Mrs. Fred Hames,
Pine Bluff.
HYGEIA—Mrs. J. B. Jameson, Camden.
PUBLIC RELATIONS—Mrs. H. T. Smith, McGehee.

ILSE F. OATES STUDENT LOAN FUND—Mrs. Charles E.
Oates, Little Rock.

PHYSICAL HEALTH EXAMINATION—Mrs. Fred Mor-
row, Fayetteville.

MEMORIAL AND CHAPLAIN—Mrs. N. B. Daniel, Texar-
kana.

DOCTORS' DAY OBSERVANCE—Mrs. Jim McKenzie,
Hope.

ARCHIVES—Mrs. H. King Wade, Hot Springs.

EXHIBITS—Mrs. T. Duel Brown, Little Rock.

ESSAY CONTEST—Mrs. J. K. Sheppard, El Dorado.

CONSTITUTION AND BY-LAWS—Mrs. C. A. Rosenbaum,
Little Rock.

CANCER CONTROL—Mrs. W. R. Brooksher, Ft. Smith.

JANE TODD CRAWFORD MEMORIAL—Mrs. James M.
Kolb, Clarksville.

FINANCE—Mrs. B. A. Rhinehart, Little Rock.

LEGISLATION—Mrs. Estes Allen, Little Rock.

LIBRARY FUND COMMITTEE—Mrs. W. A. Snodgrass,
Little Rock.

CIRCULATION MANAGER OF THE BULLETIN—Mrs.
E. D. McKnight, Brinkley.

DISTRICT COUNCIL WOMEN

FIRST—Mrs. H. S. Watson, Earle.
SECOND—Mrs. J. J. Monfort, Batesville.
THIRD—Mrs. R. H. Whitehead, DeWitt.
FOURTH—Mrs. Virgil Payne, Pine Bluff.
FIFTH—Mrs. R. B. Robins, Camden.
SIXTH—Mrs. H. E. Murry, Texarkana.
SEVENTH—Mrs. E. L. Thompson, Hot Springs.
EIGHTH—Mrs. Hoyt Choate, Little Rock.
NINTH—Mrs. Henry Kirby, Harrison.
TENTH—Mrs. J. S. Southard, Ft. Smith.

COUNTY PRESIDENTS

ARKANSAS—Mrs. C. W. Rasco, DeWitt.
CLARK-NEVADA-HEMPSTEAD—Mrs. J. W. Kennedy,
Prescott.
CRAIGHEAD-POINSETT—Mrs. O. T. Cohen, Jonesboro.
CRITTENDEN—Mrs. H. S. Watson, Earle.
FRANKLIN—Mrs. W. H. Gibbons, Ozark.
GARLAND—Mrs. E. L. Thompson, Hot Springs.
HOT SPRING—Mrs. H. L. Brown, Malvern.
INDEPENDENCE—Mrs. Ralph Weddington, Batesville.
JEFFERSON—Mrs. John Walker, Pine Bluff.
JOHNSON—Mrs. James M. Kolb, Clarksville.
LONOKE-PRAIRIE—Mrs. T. G. Porter, Hazen.
MILLER—Mrs. L. H. Lanier, Texarkana.
MADISON—Mrs. Charles Beebe, Huntsville.
MONROE—Mrs. E. D. McKnight, Brinkley.
SALINE—Mrs. T. E. Buffington, Benton.
SEBASTIAN—Mrs. Charles T. Chamberlain, Ft. Smith.
OUACHITA—Mrs. S. D. McGill, Camden.
PULASKI—Mrs. A. C. Shipp, Little Rock.
WASHINGTON—Mrs. E. F. Ellis, Fayetteville.
SEVIER—Mrs. G. L. Kimball, DeQueen.
SOUTHEAST ARKANSAS—Mrs. J. W. Schwarz, Lake Vil-
lage.
NINTH COUNCILOR DISTRICT—Mrs. Ross Fowler, Har-
rison.
UNION—Mrs. M. V. Russell, El Dorado.

MONDAY, APRIL 27, 1942**Mezzanine Floor, Hotel Arlington**

9:00 A. M.—REGISTRATION.

11:00 A. M.—Executive Board Meeting.

12:00 Noon—Executive Board Luncheon.

GENERAL SESSION

2:00 P. M.—OPENING OF SESSION—Mrs. E. L. Thompson, President, Woman's Auxiliary to the Garland County Medical Society.

INVOCATION—Mrs. H. King Wade, Hot Springs.

ADDRESS OF WELCOME—Mrs. George B. Fletcher, Hot Springs.

INTRODUCTION OF STATE PRESIDENT—Mrs. Calvin Churchill, Batesville.

RESPONSE TO ADDRESS OF WELCOME—Mrs. C. E. Kitchens, DeQueen.

REPORTS OF OFFICERS.

REPORTS OF STATE CHAIRMEN.

INTRODUCTION OF SPECIAL GUESTS.

REPORT OF THE MEETING OF THE WOMAN'S AUXILIARY TO THE AMERICAN MEDICAL ASSOCIATION—Mrs. R. H. Whitehead, DeWitt.

REPORT OF THE MEETING OF THE WOMAN'S AUXILIARY TO THE SOUTHERN MEDICAL ASSOCIATION—Mrs. W. R. Brooksher, Ft. Smith.

ANNOUNCEMENTS OF SPECIAL COMMITTEES.

REPORT OF THE REGISTRATION COMMITTEE.

REPORT OF THE ENTERTAINMENT COMMITTEE.

PUBLIC MEETING

The annual public meeting will be held in the Arlington Hotel at 8:00 P. M., Monday, April 27th. The final program will give full details.

MEMORIAL SESSION**First Presbyterian Church****TUESDAY, APRIL 28TH, 8:30 A. M.**

CALLING MEETING TO ORDER—H. Fay H. Jones, President, Arkansas Medical Society.

INVOCATION—Rev. Homer T. Fort, First Methodist Church.

MUSIC.

READING OF NAMES OF DECEASED MEMBERS OF THE AUXILIARY—Mrs. E. L. Thompson, Hot Springs

ADDRESS—W. H. Mock, Prairie Grove.

MUSIC.

BENEDICTION—Dr. Olin McKindrey Jones, First Presbyterian Church.

IN MEMORIAM

Mrs. Nell Reynolds Klugh, Hot Springs.

Mrs. Berry L. Moore, El Dorado.

GENERAL SESSION**TUESDAY, APRIL 28, 1942****Parlor, Hotel Arlington**

9:30 A. M.—CALLING THE MEETING TO ORDER—Mrs. Calvin Churchill, President.

INVOCATION—Mrs. Charles H. Nims.

READING OF THE MINUTES.

ADDRESS—Dr. H. Fay H. Jones, Little Rock. President, Arkansas Medical Society.

REPORTS OF COUNTY AUXILIARIES.

REPORT OF REGISTRATION AND CREDENTIALS COMMITTEE.

GREETINGS FROM THE WOMAN'S AUXILIARY TO THE SOUTHERN MEDICAL ASSOCIATION—Mrs. J. U. Reaves, President.

ELECTION OF OFFICERS.

ANNOUNCEMENT OF THE ENTERTAINMENT COMMITTEE.

1:00 P. M.—LUNCHEON—Private Dining Room, Hotel Arlington (\$1.12).

TOASTMISTRESS—Mrs. E. L. Thompson, President, Woman's Auxiliary to the Garland County Medical Society.

INVOCATION—Mrs. Charles H. Lutterloh.

INTRODUCTION OF PAST-PRESIDENTS.

INTRODUCTION OF STATE OFFICERS.

INTRODUCTION OF WIVES OF OFFICERS OF THE ARKANSAS MEDICAL SOCIETY PRESIDENT'S REPORT.

ADDRESS—Mrs. R. E. Mosiman, Seattle. Washington, President, Woman's Auxiliary to the American Medical Association.

ADDRESS—Mrs. J. U. Reaves, Mobile, Alabama, President, Woman's Auxiliary to the Southern Medical Association.

UNFINISHED BUSINESS.

REPORT OF COMMITTEE ON COURTESY RESOLUTIONS.

INSTALLATION OF OFFICERS—Mrs. J. U. Reaves, Mobile, Alabama.

PRESENTATION OF GAVEL—Mrs. Calvin Churchill, Batesville.

ADDRESS OF INCOMING PRESIDENT—Mrs. L. G. Fincher, El Dorado.

4:00 P. M.—POST-CONVENTION BOARD MEETING—Mrs. L. G. Fincher presiding.

ENTERTAINMENT**TUESDAY EVENING, APRIL 28TH**

The Garland County Medical Society will entertain with a banquet and dance.

Banquet Session—7:00 P. M.

Reception and Dance—9:00 P. M.

WEDNESDAY, APRIL 29TH

Own Entertainment.

Shopping.

Scenic Drives.

Motion Pictures.

LOCAL COMMITTEES

ENTERTAINMENT CHAIRMAN—Mrs. Euclid Smith.

REGISTRATION—Mrs. W. K. Smith.

LUNCHEON TICKETS—Mrs. Gaston Herbert.

LUNCHEONS—Mrs. D. B. Stough and Mrs. Charles E. Garrett.

BANQUET—Mrs. Charles H. Lutterloh.

DECORATIONS—Mrs. O. H. King.

FLOWERS—Mrs. L. D. Reed.

PUBLICITY—Mrs. George B. Fletcher.

WOMAN'S AUXILIARY PAGE

MRS. RALPH CROSS, Publicity Secretary, Texarkana

ORGANIZATION

As Chairman of Organization of the Woman's Auxiliary to the Arkansas Medical Society, I wish to call your attention to the fact that it is not possible to organize an Auxiliary except upon an invitation extended by the County or District Medical Societies, and not by the initiative of the doctors' wives.

The mere fact that we are at war among the nations places a heavy responsibility upon every patriotic American doctor and his wife.

The Post-Convention Bulletin of the Woman's Auxiliary to the American Medical Association, 1941, states that the national defense program calls for the consideration and support of every physician and every Auxiliary member, and defending America has reached an acute state in which it calls for the aid of every thinking doctor and every doctor's wife.

The doctor is always at war, fighting the mental, moral, and physical diseases of his community. He knows that wars between nations lower the normal living which he has always been trying to promote. The doctor's job is to salvage man power rather than to shoot.

It was Rene Descartes who said: "If ever the human is raised to its highest practicable level intellectually, morally, and physically, the science of medicine will perform that service."

The fifth column of today's war does not let even a child escape some measure of responsibility, and afford some token of assistance.

The Medical Auxiliary's responsibility is to assist the Medical Societies in upholding the standards which Americans and American doctors hold most dear.

There are still far too many eligible women outside the ranks of our County and District Auxiliaries. Lack of organization may be due to several factors: our failure to stimulate interest and understanding in Auxiliary affairs among the doctors; an absence of active County Medical Societies in some sections; a lack of friendly relationships and understandings among doctors and their families, which might be overcome by organization work; failure to give serious thought to the social side of the organization, to make the Medical Societies more aware of the service possibilities inherent in the Woman's Auxiliary and to interest key women in the unorganized counties or districts. Many towns and counties are too small (professionally) for an organization, but the women can join the District Auxiliary (if the doctors have seen to it that there is one) and attend a meeting twice a year. The district solves the problem of the small town, as often small organizations do not survive.

It should not be necessary for doctors' wives to be urged or solicited to join this organization. We should feel it an honor and pleasure to affiliate.

Until recent years it was the custom for doctors' wives to be just doctors' wives with no particular outlet along the lines of their husbands' profession. Cyprian tells us that "Custom is often the antiquity of error."

The wives of the men of the noblest profession on earth are fast finding a necessary place for themselves in the work of the Medical Auxiliaries. It has been said that

the Auxiliary is the torch-bearer of the medical profession.

The perennial question asked by many doctors and their wives: "What is the purpose of the Auxiliary," perhaps may be best answered in increased activity and greater usefulness and not in membership campaigns.

Many doctors will attest to the fact that the meetings of the Auxiliaries and the joint meetings with the Medical Societies have helped materially in promoting unity and fellowship through friendliness.

The philanthropic activities carried on by our auxiliaries are many and varied, practically all of them having a medical significance.

It is difficult to estimate the great influence of the individual members in the lay organizations to which they belong.

There is a large unexplored field for organization in the ten districts of the Arkansas Medical Society.

Will not the doctors in these ten districts try to interest the unorganized doctors and doctors' wives in the Woman's Auxiliary?

Modern war is total war for soldier and citizen, child and woman, regardless of occupation, vocation, or profession. Perhaps some worthwhile objective might interest these doctors' wives and bring them into the fold of Auxiliary organization work. A Red Cross Nutrition Aide Course might serve as a starter.

"Physical well-being is our first line of defense." "The right food will win the war, and write the peace."

Again, let me remind you that a Woman's Medical Auxiliary cannot be organized except upon the invitation of the County or District Medical Society.

(Mrs. Chas. W.) EVELYN T. DIXON,
Chairman, Organization.

Mrs. S. J. Wolfermann, Sebastian County Commander of the Women's Field Army of the American Society for the Control of Cancer, discussed plans for the annual national membership drive of the Women's Field Army, conducted each year in April, at a luncheon meeting of the Auxiliary of the Sebastian County Medical Society, March 9th. Due to the absence of Mrs. W. R. Brooksher, State Commander of the Field Army, Mrs. Wolfermann took her place on the luncheon program.

Luncheon was served at 12:30 o'clock. Hostesses were Mrs. J. S. Southard and Mrs. W. J. Nelson, Jr. Mrs. Charles T. Chamberlain, Auxiliary President, conducted a business session at which reports of Committee Chairmen were made.

Mrs. L. D. Soper, wife of Colonel Soper, head of the Medical unit at Camp Chaffee, was a guest. Members present were Mrs. J. S. Southard, Mrs. A. A. Blair, Mrs. S. J. Wolfermann, Mrs. S. P. Stubbs, Mrs. J. L. Kellum, Mrs. Thomas P. Foltz, Mrs. W. F. Rose, and the President, Mrs. Chamberlain, and hostesses, Mrs. Southard and Mrs. Nelson. Out-of-town members present were Mrs. C. W. Hall, Greenwood, Mrs. B. L. Ware, Greenwood, Mrs. B. B. Bruce, Alma, and Mrs. G. G. Woods, Huntington.

Mrs. W. F. Rose,

Publicity Chairman of the Auxiliary of
the Sebastian County Medical Society.

PUBLICITY

Despite the fact that the word publicity is professionally abhorrent to the individual medical practitioner, the medical profession would be making a mistake of the first magnitude should it allow that abhorrence to include the profession as a whole or extend it to medical society auxiliaries.

Publicity definitely has its place in the sun and should be recognized for all its potentialities. Basically publicity may be defined as a business term for propaganda. Born of war, the word propaganda has been given a more or less sinister interpretation, which is also more or less of a mistake, because there is good propaganda as well as bad propaganda.

The primary business of medicine and its auxiliaries, it seems to me, is the business of selling good health to our men and women and boys and girls. Goods cannot be moved unless their quality is publicized and there is shown beyond a shadow of a doubt that a need exists for those goods.

Consider medicine and the activities of the medical auxiliaries in that light and you've got the nucleus of a case for publicity. People cannot be taught good health unless provision for getting the information to them is made. There are no greater avenues upon which we might parade the information than through the public press and over the radio.

But why report to the public press that the medical auxiliary "met and et" at such and such a place at such and such a time. Why indeed? There is no excuse for that type of skeletonized publicity. What should be reported is what was done and what was said, particularly what was said. Medical auxiliaries in the first place must have a definite program with a definite objective, and that objective should be the same objective of their husbands—improving the health and welfare of our fellow citizens. Make your programs educational in scope and make your message to the people as interesting and as beneficial as possible. They will be read and they will learn. Don't sell publicity short. It is worth its weight in gold.

MRS. RALPH CLINE CROSS,
Publicity Sec'y, Texarkana, Ark.-Tex.,
State Publicity Sec'y.

More than twenty members of the county Medical Society and Auxiliary met at the Marvin Hotel last evening at 6:30 for their monthly dinner, to be followed by the individual program meetings of the two groups. Mrs. J. H. Kennerly was hostess at the dinner.

The table was decorated with arrangements of jonquils flanked by yellow tapers, and a delicious two-course menu was served.

The Medical Auxiliary remained at the hotel for their program meeting at which Dr. Ralph Weddington was a guest speaker discussing "Public Health and Its Relation to Civilian Defense." This splendid and timely address was followed by a quiz on the life of Jane Todd Crawford. The Cancer Control Campaign under the sponsorship of the Medical Auxiliary in Arkansas, was discussed and a home nursing course to be given in Batesville under the chairmanship of Mrs. J. E. McCormack, was outlined.

During the business session, Mrs. Finis Q. Wyatt was elected president of the Independence County Auxiliary for next year; Mrs. O. J. T. Johnston was named vice president, Mrs. Hickman Calaway, secretary, and Mrs. R. C. Dorr, treasurer.

In observance of Doctor's Day, the Bowie and Miller Medical Auxiliary held a fitting program February 27th at the USO building, with Mrs. L. H. Lanier conducting a brief business session.

General reports were heard and splendid report was given by Mrs. A. G. Lee, treasurer. Mrs. Ralph Cross and Mrs. Harry Murry were commended for having placed flags on the graves of departed doctors, a custom originated by Mrs. Cross.

Talks on "Cancer Control" and Red Cross work were made by Mrs. N. B. Daniel, Mrs. William Hibbitts, Mrs. R. R. Kirkpatrick, and Mrs. C. H. Franks, after which Mrs. J. T. Robison introduced Miss Dorothea Nylin, assistant director of the USO, who talked on activities of the organization. An inspection of the building followed her talk.

Two new members, Mrs. Imes and Mrs. H. Williams, were introduced.

Twenty members were present.

Mrs. Churchill met with our Auxiliary February 20th and delivered a very interesting paper on our place in the defense of America. We enjoyed Mrs. Churchill very much and were disappointed that she could spend so short a time with us.

MRS. HUNTER A. CAUSEY, Pine Bluff.

PROTECT YOUR ESTATE

The Bureau of Legal Medicine and Legislation of the American Medical Association has made some valuable suggestions for the physician. Because the physician's estate may have trouble in proving that an account is bad and also in obtaining an allowance on it to be deducted from the income tax, he should write off known bad accounts at least annually. Some physicians pursue the practice of entering on their books charges for services rendered to patients who are admittedly charity cases, even though there is no intention to collect or attempt to collect the charges. The estate will be forced to prove the uncollectibility of such accounts or else pay an income tax on them. These entries often carry nothing which will aid the administrator or executor in convincing the collector of internal revenue of the physician's intent.

It is suggested that physicians keep in their files all procurable information which might aid in determining whether or not an account is collectible. If the book accounts of a physician represent a substantial amount, he should anticipate the possibility that on his death a substantial income tax may be payable by setting aside sufficient cash to take care of the taxes or by providing insurance to cover them. If this is not done the estate may have to be liquidated at a sacrifice to provide cash sufficient to pay the taxes. It is advised that a physician consult an attorney or an accountant for the purpose of estimating the amount of such taxes, so that adequate provisions may be made during life to prevent an unnecessary strain on the estate after death.

Conn., M. J., March, 1942.

BENJAMIN EDWARD HENDRIX, age 70, died at his home in Gillham March 15th. Born in Statesboro, Georgia, he graduated from the University Medical College of Kansas City in 1900 and first practiced at Chapel Hill. He had been located at Gillham for many years and was president of the Bank of Gillham from its founding to his death. The Arkansas Medical Society elected him to honorary membership at the annual session in 1939. Surviving relatives are his wife, two sons and a daughter.

RANDOM THOUGHTS OF THE SECRETARY

February 12th. Snodgrass, with his accurate and complete membership report from Jefferson County Medical Society for 1942, excites the admiration of the assistant secretary.

February 13th. Goldstein with eagerness and enthusiasm journeys to Little Rock one week early today for the committee meeting he had called. Which reminds us of a similar personal experience in Oklahoma City in days gone by when we could have kept it all to ourselves but it was just too good a story, so most everyone got a laugh on us.

March 8th. With a total absence of traffic difficulties, we motor to Fayetteville this fine afternoon, able to enjoy the trip and the mountains without much thought of tire mileages. Visiting briefly with Huntington who speaks of four youngsters at home each wishing to do a different thing, a viewpoint which finds us sympathetic, having one youngster who is ever wishful of doing four things at the same time.

March 12th. Having read our mail from Benton County's able secretary, Chastain, we head north this afternoon with Ken Thompson as our listening companion and shortly eat one of the Harris Hotel's good dinners. The fellows from the Smith Clinic, up Kansas way, put on a good program, the allergists, in particular, speaking in practical and interesting ways. As it must be, we speak on civilian defense and allied subjects akin, all too closely, with the scientific practice of medicine these days, and thence down the mountain without fog and to home early in the morning hours.

March 18th. Comes the photograph of Arkansas' naval medical officers and we observe sadly that Krock has

been too busy with the social side of naval life to learn the rudiments of naval demeanor, such as standing at attention.

March 22nd. This day visiting in Northwest Arkansas finding that Paddock has resected all the prostates and now gloats in the discovery of a median bar in a female, thus opening new fields. Later calling on Clyde McNeil, at rest in his home, without the services of the famed Huey, but happy nonetheless over the whole situation. Happening in as we do, it is no surprise that we enter a Farm Security Administration conference of Clyde and A. J. Harrison.

March 24th. This afternoon with the Crawford County Medical Society, attended by all but one member, where there is enthusiastic discussion and preparation for civilian defense.

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ARKANSAS MEDICAL SOCIETY

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THE CONTROL OF ESTROGENIC THERAPY DURING THE MENOPAUSE WITH VAGINAL SMEARS *

JULIUS H. HELLUMS, M. D.
Dumas

In discussing the changes in the smear of the vaginal fluid in the presence and absence or decrease in the influence of the estrogenic or follicular hormone, it probably would be a good idea to discuss just what the vaginal fluid is, and how the changes occur. It might also be a good idea to review the histology and part of the physiology of the vaginal epithelium, because the contents of the vaginal fluid depend upon its histology.

The vaginal fluid is composed of bacteria, secretions from the vaginal epithelium, products from the uterus and cervix, and cast-off cells from the surface of the vaginal epithelium. Presence of infection of the vagina and cervix naturally changes the fluid and must be taken into consideration in the examination of it. Infection should be cleared up to remove its products. The vagina is lined with a stratified squamous epithelium. Microscopically it has about three types of cells. There is a basal layer of cells which is rather distinct and consists of small, round cells with large nuclei, with a rather loose stroma. The mid-zone is composed of somewhat larger, less compact, cells with a smaller nuclei. These cells take a light stain. The superficial zone is composed of larger flat cornified cells with pyknotic nuclei. These cells take the lightest stain of all three types.

Since the vaginal fluid contains cast-off cells from the superficial layer of the epithelium, the type of cells that lie on the surface of the epithelium determines the picture one sees in the microscope when examining the fluid. In the presence of a good estrogenic influence on the vaginal epithelium, as seen in a normal girl in the

child-bearing age, the epithelium has all of its layers and the surface is covered with the large flat cornified cells with small pyknotic nuclei. In the menopause, or during a poor estrogenic influence, as seen in hypogonadism, the vaginal epithelium becomes thin and the normal surface epithelium cells are gone, and only the deeper cells or basilar cells remain as a covering or surface of the epithelium, which consists of smaller, round cells with larger nuclei. There is also an infiltration of polymorphonuclear leucocytes.

These two types of cells have different staining characteristics when stained in the proper manner. Whatever type of cell is covering the epithelium is constantly being cast off and collects in the fluid of the vagina.

Examination of the fluid is important because it serves as a guide as to the degree of estrogenic influence and from a study of it one can be positive as to whether his patient is receiving adequate hormone or not. I do not intend to leave the impression that one cannot administer estrogens or treat the menopause with estrogens intelligently without the use of vaginal smears, but I do intend to impress upon you that the use of vaginal smears can be of a great assistance in most cases, and can be almost indispensable in others.

I know quite often a patient comes into my office, and I suspect, but wonder, if her symptoms are really coming from the menopause. I know quite often I wonder if I am giving my patient enough, or an excessive amount, of estrogenic hormone. I want to impress on you that vaginal smears can answer these questions, and I feel that often the same problem presents itself to you, as to me. If you watch your patient's vaginal smear when it reaches the degree of

* Read before the Sixty-sixth Annual Session, Arkansas Medical Society, Little Rock, April 15, 1941.

complete cornification you can rest assured that you have done all you can for her with estrogenic therapy. If you think you might be giving too large doses of estrogen and the vaginal smear shows complete cornification you can begin to decrease the dosage or lengthen the interval of dosage; find the exact dose which will maintain cornification.

You do not have to always maintain complete cornification to obtain relief of symptoms, but it is well to carry the patient to that point in every case and obtain complete relief of symptoms, and then gradually decrease the dose, using clinical symptoms to tell you when to stop decreasing. I find that patients can be carried along free from symptoms with less hormone if carried to complete cornification and gradually withdrawn then to start on a very small dose and gradually increase up to the point of freedom from symptoms.

There are some cases that obtain relief from untoward symptoms before there is a complete cornification of the epithelium, but the most resistant cases invariably become free from symptoms when complete cornification is attained.

The morphological and staining characteristics of the cells serve as an accurate guide to the degree of estrogenic influence. Papanicalaeu and Shorr in 1935, published a study of vaginal smears in relation to the menopause and its therapy, in the "Proceedings of the Society of Experimental Biology and Medicine" and again in 1936, another article of further study in the "American Journal of Obstetrics and Gynecology." The method they use is as follows:

The specimen is taken with a slightly curved pipette with a rubber suction bulb attached to the end. The tip of the pipette, with the bulb compressed, is inserted about $2\frac{1}{2}$ inches into the vagina without the use of a speculum and as it is being withdrawn the rubber bulb is released so that the fluid is aspirated into the pipette. The fluid is then blown out on a glass slide, if possible, and is then spread out into a thick smear with the tip of the pipette and immediately placed in a bottle or container of equal parts of 95% alcohol and ether, taking care that the slide does not dry. The slide is left in the solution then for 45 minutes for fixation. You may leave them in the solution for several days if you desire.

When ready to stain the slide it is carried through the following stains and solutions:

1. 80% alcohol for 1 minute.
 2. 70% alcohol for 1 minute.
 3. 50% alcohol for 1 minute.
 4. Distilled water 1 minute.
 5. Harris' Hematoxylin 1 minute and wash in 100 cc. tap water to which 4 drops of ammonia have been added.
 6. Stain 1 minute in a solution of 1% Biebrich Scarlet, water soluble, and 0.4% Orange G in 1% Acetic Acid and rinse in distilled water.
 7. Mordant 1 minute in a mixture of equal parts of 5% phospho-molybdic and phospho-tungstic acids and rinse in distilled water.
 8. Stain 2 minutes in 0.5% solution of Fast Green F.C.F. in 0.3% acetic acid. Do not rinse.
 9. Differentiate in 1% acetic acid for 1 minute.
 10. 50% alcohol 1 minute.
 11. 80% alcohol 1 minute.
 12. 95% alcohol 1 minute.
 13. Absolute alcohol 1 minute.
 14. Xylol 5 minutes.
- Then mount in damar and examine.

This method of staining is Dr. Shorr's latest staining technique which he mailed to me this past summer. The colors are fairly permanent.

The stained smear of the vaginal fluid during the menopause is characteristic. As you remember, the vaginal epithelium is thin and the cells that form the surface are of the intermediate type or near basal type, small, round cells with larger nuclei. These cells take a deep or pale green stain, depending upon the degree of estrogenic influence or thickness of the epithelium. This smear also contains many polymorphonuclear leucocytes, many more bacteria than the cornified smear of the stronger estrogenic influence type, and little or no mucous. The smear, as a whole, has the green color with thick round cells intermingled with many leucocytes. As treatment with estrogens progress toward complete control, the bacteria and leucocytes begin to disappear and the epithelial cells begin to become larger and more distinct, taking a lighter green stain. Mucous begins to appear in the smear and when cornification begins to appear there appears an occasional pink stained, large, flat, cornified cell. When cornification becomes pronounced, indicating strong estrogenic influence, the cells are all, or practically

all, of the cornified type with the majority of them taking a pink stain. There is a definite leukopenia and an occasional mucous patch or shred is seen. This change is readily explained by the appearance of the vaginal epithelium, because, as you remember, the epithelium becomes thicker and the surface is again covered with the large flat cornified cells which normally are there. The different appearance of the typical dirty menopausal smear, before and after sufficient therapy for complete cornification is striking, with varying appearing slides between them of slides from treatment inadequate to produce cornification.

Case No. G-32

Patient was a female, age 55, complaining of obesity and hypertension. Since her weight showed a rather marked increase following cessation of menses, 10 years previous, and since she presented rather prominent nervous symptoms and had a normal basal metabolic rate, I thought possibly that estrogenic therapy might help in the reduction of weight. A vaginal smear taken on Dec. 3, 1940, presented an atrophic smear. She was given 1 mg. Theelin intramuscularly daily until Dec. 10, 1940, at which time a satisfactory cornification was noted. Theelin administration, although, obtained a feeling of well being and produced a cornified smear, helped none in her weight reduction.

Case No. K-2

Patient was a female, age 30. This is a very interesting case. She presented herself to me on Oct. 5, 1940, complaining of severe dysmenorrhea, menorrhagia, and metrorrhagia. She gave history of menstruating profusely every 14 to 21 days, with so much pain that she was compelled to go to bed. Her husband said she was compelled to take some very strong sedative at every period, and was so nervous between menses she would take bromides. She cried easily at any thing.

She was operated on in Feb., 1938. She had a right oophorectomy and resection of left ovary. Before that time she menstruated regularly at 28-day intervals with no pain. She weighed 150 pounds, but was about 15 pounds under her usual weight. A series of vaginal smears were studied daily up to Nov. 11, 1940. All of her slides were atrophic. Her weight was 185½ pounds.

She was given Theelin 1 mg. tri-weekly until Nov. 16, 1940. Her smear was still atrophic. Her injections were increased to 1 mg. every

other day until she began menstruating on Nov. 24, 1940, at which time she suffered severe cramping. An endometrial biopsy was taken the first day of flow and was diagnosed "Late interval endometrium shortly after ovulation." Knowing that the endometrium shortly after ovulation shows very little changes I concluded that the diagnosis was a very easy mistake to make and that ovulation had not occurred.

She began .33 mg. Ben-Ovocylin daily for 7 days, at which time she still had an atrophic smear. Her injections were increased to .66 mg. daily until Dec. 12, 1940, at which time cellular form was noted. She felt some better and had not menstruated. .66 mg. were continued daily until Dec. 25, 1940, and she showed no improvement in her smear, but had not menstruated. On Dec. 25, 1940, 1.66 mg. was given daily until Dec. 29, 1940, at which time fairly satisfactory cornification was noted. The patient was feeling fine, had not menstruated since Nov. 24, 1940, was not nervous, and was losing weight. She received 1.66 mg. twice weekly then until Jan. 14, 1941, at which time she weighed 166¼ pounds, and on that date she began spotting, and by the next day was flowing freely. She began to have hot flashes again and grew extremely nervous. She stopped flowing on Jan. 19, 1941. She continued 1.66 mg. Ben-Ovocylin twice weekly and felt good until she began flowing on Feb. 6, 1941, at which time hot flashes, nervousness, and abdominal soreness returned. She had an intermittent spotting and nervousness until she received X-ray therapy to the pelvis for destruction of the ovaries, and menses stopped March 4, 1941. She has been satisfactorily controlled since with oral therapy of 2 tablets of Hormotone T, which contains 1000 I.U. ketohydroxy estrin and 1/10 gr. thyroid to each tablet, three times daily, although they do not maintain a cornified smear.

I have classified this case as a post surgical functional bleeding, or a premenopausal anovulatory flowing.

Case No. R-15

Female, age 40, presented herself complaining of nervousness, sweats, hot flashes, and heart consciousness. She had radium applied intra-uterine in 1933 for uterine hemorrhage, since when she has not menstruated. A vaginal smear on Jan. 28, 1941, presented an atrophic picture. She was placed on hormotone T, three tablets three times daily until Feb. 4, 1941, at which time her smear was still atrophic. She received no more treatment until March 10,

1941, at which time she presented this smear. She was placed on 4000 I.U. Estrolin (Lakeside) until March 17, 1941, at which time the dosage was increased to 8000 I.U., three times daily until March 20, 1941, when she presented a good cornified smear. All symptoms were controlled.

Case No. S-210

Female, age 39, came to me on March 1, 1941, complaining of extreme nervousness, severe headache, occasional hot flashes, insomnia, and sweats. When patient held her hand out she presented an extreme tremor. She cried easily, cried in my office. Her menstrual periods have not stopped completely, but she menstruated at long intervals of 3 to 4 months. Scanty flow. A vaginal smear on that day was atrophic. I gave her 1 mg. Theelin intramuscularly, and she returned the following day, March 2, 1941, saying that she felt better than she had in a very long time. On that day and on March 3, 1941, and March 4, 1941, she received 1 mg. Theelin, which made 1 mg. daily for four days. She began menstruating on March 6, 1941. She received 1 mg. Theelin on March 7, 1941, and stopped flowing until March 10, 1941, at which time she returned, extremely nervous and shaky again. She again cried in my office. She elected to take Estrogen orally and I started her on 8000 I.U. Estrolin (Lakeside) three times daily. A vaginal smear on March 21, 1941, presented a relative leukopenia and some degree of cornification. She was not so nervous and said she had stopped crying. Her hands still presented a tremor. She was placed on 12,000 I.U. Estrolin three times daily for eleven days, until March 28, 1941. She was not so nervous, but still had a slight tremor. A vaginal smear showed a leukopenia and only a fair number of pink staining cornified cells. This slide corresponds to the clinical improvement she has made. She has improved sufficiently, however, that she is away on a visit at the present taking with her a box of Estrolin tablets. I have been unable to get further smear.

Summary

(1) I have presented four cases, two that receive intra-muscular medication alone, one that received intra-muscular, followed by oral medication, and one that received oral medication alone.

(2) Examination of vaginal fluid is a great aid in treating the menopause with estrogenic hormone.

(3) It is not essential to **maintain** a completely cornified smear to obtain relief of symptoms.

(4) I believe that if a patient is carried to a well-cornified stage she can be maintained on a smaller dosage subsequently.

(5) Vaginal smears offer a diagnostic aid in determining whether a patient's symptoms are really a result of the menopause.

(6) Vaginal smears offer a method of carefully studying and controlling the dosage of a given patient when it is often a perplexing problem otherwise.

ALL PHYSICIANS ENTERING MILITARY SERVICE SHOULD GET ADVICE ABOUT THE SOLDIERS' CIVIL RELIEF ACT

Physicians who have entered the military service, those contemplating doing so, and those who by reason of age are eligible for military service under the Selective Service Act should make proper plans for protecting their property interests and life insurance during their terms of service.

Every such physician should seek the advice of competent legal counsel on such matters, especially requesting information and advice regarding the provisions of the Soldiers' and Sailors' Civil Relief Act of 1940, "suspending enforcement of certain civil liabilities of certain persons serving in the military and naval establishments."

This Federal Act does not relieve a person in the military service from payment of his obligations or fulfillment of his legal contracts but offers him a moratorium on some of his obligations and contracts until he has been discharged from military service, when it has been determined that his ability to meet his obligations and contracts is impaired because of military service.

A moratorium on the payment of premiums on life insurance contracts up to a certain amount is provided. This provision of the act is administered through the Veterans' Administration. All other provisions of the law are within the jurisdiction of the local courts. The law specifies what procedures should be taken.

Generally, the protection afforded is against eviction or distress for nonpayment of rent; against foreclosure of mortgages, deeds of trust, installment sale contracts, etc.; against penalties assessed because of inability to pay taxes, special assessments or levies; and against the taking of undue advantage in court proceedings because of the absence of a party to such action.

Space will not permit publication of the detailed provisions of the act. Detailed information should be obtained by a physician, if interested, from his personal attorney. In some instances a physician may be able to work out with those holding his mortgage or note a satisfactory agreement regarding deferment of payments on the principal, perhaps interest, but where satisfactory arrangements cannot be made, legal advice should be obtained and the provisions of the civil relief act utilized if necessary.

GERIATRICS: GENERAL REMARKS ON THE CARE OF THE AGED *

R. H. JOHNSTON, M. D.
Clarksville

In recent years the diseases common to old age have received more and more attention. This is due principally to the advances in medical knowledge which have increased the life-span. The medical management of disease in individuals beyond the sixth or seventh decade of life presents so many unique problems that it is gradually becoming recognized as a specialized field. Geriatrics today occupies as important a position in medical science as does pediatrics. The January, 1940, issue of the Medical Clinics of North America consists of a symposium on geriatrics which I have found of interest. The symposium has served as a source of material in the preparation of this paper.

The physician who numbers among his patients some of the very old may count himself fortunate. A doctor called to advise older people would do well to first meditate on some of the characteristics of these patients. The life-long individual character pattern becomes less pliable and more accentuated with age. The patient who has so long outwitted nature may have more faith in his own regulations and remedies than in those a stranger tries to impose upon him. He is often impatient with medication or regimen which fails to bring immediate symptomatic improvement. The patient often has already formed his own diagnosis (and a correct one sometimes at that). Probably nothing induces greater cooperation from the patient than his feeling that he is sharing the responsibility of the physician in promoting his cure. Foremost should be the resolution to approach the patient not as a problem but as a real individual. In the aged, the low level of tolerance to metabolic and physiologic disturbances is accompanied by a low level of regenerative power.

One of the most important decisions the physician must make is: should the patient stay in bed. Frequently the course of an illness may be entirely changed by this critical decision. Many therapeutic procedures must be modified due to the emotional outlook of the aged. It is frequently wise to keep an elderly patient sitting up in a chair instead of in bed. In this connection, one must consider not only the imminent danger of hypostatic pneumonia subsequent to being confined in bed, but the profound mental depres-

sion the aged undergo when they are aware that disease has at last conquered them, and that they must take to their bed. Of course, many conditions will require absolute bed-rest. A patient with cardiac decompensation may require only a few days in bed to achieve compensation and diuresis. Patients with unexplained fevers are likewise best kept at bed-rest until a definite diagnosis is established. The best treatment for a patient with hypertension during a transient hypertensive crisis is absolute bed-rest.

Whether or not an aged individual should be subjected to drastic dental surgery because of numerous carious and abscessed teeth is a decision best made by the physician rather than by the dental surgeon. Although tooth extraction is a simple procedure in a young individual, severe systemic reactions often follow multiple extractions in older people. Conservative treatment of dental infection with removal of one tooth at a time if absolutely necessary is the safest procedure to follow.

A frequent source of difficulty in caring for the aged is the onset of psychotic behavior. The indiscriminate administration of sedatives is one of the commonest causes of psychoses. One of the results of cerebral arteriosclerotic changes is an increased capillary permeability. Whereas an individual with an intact vascular system has a high tolerance for bromides, in the arteriosclerotic they diffuse more rapidly from the blood stream to the cerebro-spinal fluid. Barbiturates must be administered with even more care than bromides. Veronal is excreted almost entirely by the kidneys. The impaired renal function usually present in the aged as part of the arteriosclerotic process would contraindicate the use of this drug. Barbitol and phenobarbital are metabolized slowly and as a result have a prolonged effect. The rapid-acting barbiturates are apt to produce excitement and psychotic behavior during the peak of the drug effect. A minimum of sedation of any type is therefore preferable. If a hypnotic is required, it should be prescribed with an awareness of its possible untoward effects. The same limitations which apply to the bromides and barbiturates hold for almost all sedatives, including paraldehyde, chloral, hyoscine, hydrobromide, and the narcotics. Whiskey is a good sedative which is not often considered by the younger physician. In addition to toxic psychoses due to sedatives are those resulting from other medication, the most common of which is digitalis. Too much emphasis cannot be placed upon the behavior reactions of the aged patient. Many diagnoses are missed because

* Read before the Sixty-sixth Annual Session, Arkansas Medical Society, Little Rock, April 16, 1941.

the patient is dismissed as senile dementia or cerebral arterio-sclerotic without adequate investigation. In a recent article Dr. Brown of Northwestern University, recalls that within a period of two months he saw four elderly patients committed to a mental hospital unwarrantedly: the first because of bromide intoxication resulting from medicine prescribed by the patient's physician; the second, an acutely hallucinated patient who subsequent to admission was found to have broncho-pneumonia; the third, an elderly female with a macrocytic anemia whose psychotic manifestations disappeared after the parenteral administration of liver extract; and the fourth, an elderly man with arterio-sclerotic heart disease in decompensation. Bed-rest for a few days and digitalization cured the psychosis. Urinary retention in the elderly male with prostatic hypertrophy is a common source of difficulty. If gradual in onset, it may even be another cause for psychosis when the blood urea-nitrogen becomes elevated. Repeated catheterization or an indwelling catheter for a few days may give temporary relief.

Most body functions, from conception to death, are under hormonal control, but the mechanism of this control is not clearly understood. As our knowledge of endocrine function in later life increases we shall probably have a better understanding of the aging process. Some observers have attributed the changes associated with aging to reduction in sexual activity and have attempted to rejuvenate old men with testicular transplants. The gradual reduction in the production of energy per square meter of body surface with age would suggest a gradual reduction in thyroid function. There are reasons for believing, however, that the process of aging is a complex one and involves perhaps all glands of internal secretion and the tissues which they stimulate.

About a third of the cases of myxedema occur after the age of fifty and about half of them between the ages of fifty and sixty. Coronary thrombosis is a serious complication of treatment in older people and may develop when the metabolism is raised rapidly to the normal level. The initial dose of desiccated thyroid should not exceed $\frac{1}{2}$ grain (U. S. P.) daily and, thereafter, changes in the dose should be made gradually.

The treatment of toxic goiter is the same in older individuals as it is in younger patients, namely, thyroidectomy following adequate pre-operative preparation. The single most important factor in determining the outcome of operation, regardless of the age is the preoperative

condition of the patient. The most important difference in toxic goiter in later life is the higher incidence of heart disease, which is chiefly of the hypertensive and arteriosclerotic varieties. This increases the mortality slightly. Hyperthyroidism per se does not cause cardiac decompensation and, when decompensation is present, it indicates that the heart is independently damaged. When decompensation is present, it is usually desirable to wait until it disappears before undertaking operative procedures.

The changes in testicular function with advancing years are not well worked out, but there appears to be some decrease in the rate of production of male sex hormone and of spermatazoa. In some instances impotence and a condition known as "male climacteric" may be associated with these changes and be corrected by glandular therapy. This may be either of the stimulation variety (gonadotropic material) or of the substitution variety (testosterone propionate). Such treatment must be given with great care in older men. The increased activity associated with an increase in the amount of circulating male hormone may tax the cardiac reserve and precipitate cardiac decompensation, and the stimulation of the prostate may aggravate prostatic hypertrophy. In spite of numerous reports to the contrary, treatment with male sex hormone does not appear to be effective in benign prostatic hypertrophy.

Gastro-intestinal disturbances are so diverse that only certain generalizations can be made here. Because a patient is old, surgery, if conservative, is not contraindicated. Of the non-surgical conditions, one of the most frequent sources of difficulty is obstipation due to fecal impaction. The loss of muscular tone of the abdominal muscles and sedentary habits of the aged are recognized factors in delaying the normal bowel movements. Although the large bowel may withstand years of purging and catharsis, there comes a time when substitution of a bland diet and the smooth bulk obtained from vegetable mucilage (such as Searle's metamucil) proves a more effective form of therapy, especially in patients with diverticulosis. Substitution of pureed vegetables and the addition of vegetable mucilage in many instances is all that is required to re-establish normal bowel function. Because of chewing difficulties many foods are avoided. If there is a suggestion of specific dietary deficiency, adequate vitamin supplements should be provided. There is no point in the elimination of specific articles of diet such as meat or coffee. Nutritional edema due to low

protein intake **following** prolonged restriction of meat is not too uncommon.

It is surprising how few patients who are past seventy have frank clinical cardio-vascular disease. It would appear that the usual types of heart disease remove the patient from the scene before he reaches seventy. The almost universal cause of heart disease of old age is arterial degeneration. It has been well demonstrated that coronary artery degeneration is present in most people of fifty. The presence or absence of clinical heart disease at seventy depends upon the speed with which the degenerative process moves, and upon the vessels that develop the greater damage. Care in selection of one's ancestors is not very helpful advice. The physician should urge temperance in all activities and an honest attempt to slow down the tempo of life. Geriatric patients should be cautioned against excessive use of tobacco. Moderation in the use of alcohol should be insisted upon.

Many patients will show only slight diminution in cardiac reserve, having breathlessness on exertion and a feeling of tightness beneath the sternum. There may be a little hypertension, but just as often the blood pressure is normal or low. These patients should not be treated too vigorously. The greatest good can be obtained by a wise management and not from the administration of drugs. Avoidance of exertion known to bring on distress, a short rest period following meals, and a less strenuous emotional life will frequently bring about relief. Digitalis should be avoided in cases of this sort, as it gets patients into trouble rather than keeping them out of it. Patients who develop marked anginal pain on exertion usually have evidence of arterial disease elsewhere. Frequently they will have hypertension. The pain and distress in this group is not only uncomfortable, it is disabling. There may be sharp attacks of angina pectoris, and these patients are candidates for coronary occlusion. Pain-producing effort should be minimized or abolished. Rest following meals is most desirable. Careful attention should be given the bowel. Straining at stool is a hazardous procedure. Pain comes on much more readily when the bowel is filled with gas. Emotional stress must be avoided. Medication should be directed toward increasing the coronary blood flow. For immediate relief of pain, nitroglycerine under the tongue has few if any superiors. As permanent coronary dilators the nitrites are not as useful as the purine base compounds. Theobromine salts or theophylline salts will be

found effective in a high percentage of cases. My personal choice is theobromine calcium salicylate or aminophylline. Phenobarbital to relieve emotional tension is valuable in some cases.

The elderly patient often has abnormal cardiac rhythms. Extra-systoles seldom require treatment. Ectopic beats frequently can be reduced by careful attention to the bowel. If the ectopic beats are quite annoying to the patient, the cautious use of quinidine may be warranted. Quinidine is also useful in cases of auricular fibrillation when there is a fairly good myocardium. Digitalis should be administered only in patients with cardiac failure. In the absence of cardiac decompensation, digitalis will do little good and harmful results are apt to appear.

The major cardiac emergency that arises in geriatric patients is the occurrence of acute coronary occlusion. The pain, falling blood pressure, fever, leucocytosis, the friction rub and increased sedimentation rate are no different in the aged than they are in the younger patient. Immediate and complete rest is of course essential. Lately we have come to value the administration of oxygen highly. There is reason to believe that it puts the heart at considerable advantage. Morphine has long been used to reduce pain and enforce rest. Morphine, however, sensitizes the vagus and might thus accelerate the reflex coronary constriction. It has no direct effect upon the coronary flow volume. Papaverine, on the other hand, does not augment vagus activity, and there is some experimental evidence to indicate that papaverine increases the coronary flow. The ability of atropine to block the vagus effects is well known. Rest, oxygen, papaverine and atropine, with morphine when necessary, and sometimes aminophylline constitute the emergency treatment of acute coronary occlusion. There may be other devices or remedies that are of value, but these are the important ones.

Rheumatic heart disease and essential hypertension with cardiac disease are occasionally encountered in the aged, but not often. When we are required to treat one of these diseases in the aged there is no great difference in the treatment because of the fact that the patient is a few years older, except for the use of greater moderation in treatment.

The problem of antisyphilitic treatment of elderly patients must be considered in this era of Wassermann consciousness. A patient who has been able to survive to an age of seventy

years with a positive serology should be treated cautiously, if at all. Small doses of iodides or mercury rubs with careful urinalysis have been found most satisfactory. These drugs should be stopped if an appreciable rise in the pulse occurs. Active intense therapy is apt to cause more harm than no treatment at all.

All of us are acquainted with the oft-quoted dictum of Osler, "Pneumonia may well be called the friend of the aged." Taken off by pneumonia in an acute, short, and relatively painless illness, the old escape those "cold gradations of decay" that so often make the last days of life a burden. Though modern methods of treatment have achieved a remarkable decrease in the mortality of pneumonia, the "pneumonia of the aged" continues to show a death-rate much out of proportion to the reduction in mortality in the whole group of pneumonias.

In the care of the geriatric patient moderation on the part of the doctor is just as necessary as moderation on the part of the patient. It is fundamental to recognize that geriatrics is a subject which the physician must approach with great patience, humility and understanding.

CORRESPONDENCE

UNIVERSITY OF ARKANSAS

School of Medicine

LITTLE ROCK

March 10, 1942

To the Editor:

The reason for this letter is that there has been some bitter talk among the doctors and a feeling by some that all doctors should be available for military duty. I think there has been some resentment because the School of Medicine has an essential list of the faculty. This list dates back to July, 1940, when Dr. Cutter requested it for the Medical Preparedness Committee of the American Medical Association. It was recognized then that the training of doctors is a defense project. Medical students who maintain a satisfactory record should be and have consistently been deferred in order to complete their medical training. In line with this, a minimum staff for the School of Medicine must be maintained.

This project has not changed essentially since war was declared. The Procurement and Assignment Service has been inaugurated in place of the Medical Preparedness Committee. The Executive Officer is Dr. Sam Seeley, who is also a Major, with an office in Washington, D. C. In January, Dr. Seeley sent to the deans of medical schools a request for lists of essential and available faculty members. I quote one paragraph from that request:

"This letter is being directed by the Procurement and Assignment Service to the deans of all accredited medical schools in the United States. As the dean of such a school, you are hereby requested to submit to the Executive Officer of the Procurement and Assignment Service a list of all the members of the teaching staff of the

school with which you are associated, together with a clear statement regarding each man as to whether he is now available for service (military or otherwise) or is regarded as 'essential' to the proper operation of the school. This list will be regarded as confidential information and will be used by the Procurement and Assignment Service in its program of classifying medical personnel with regard to availability. It will be used for the purpose of providing adequately for national defense and is designed to protect essential educational and research activities as well as to advance procurement of specialized personnel for military and other agencies."

In making up such a list of the faculty, there was named as essential only a minimum staff. From about ninety part-time faculty members, only twenty-five were designated as essential. Personal feelings were ruled out as much as possible. The considerations were a record of willingness to take a substantial amount of time from practice and the ability to teach. In this time of national emergency we have to be sure we can depend on our faculty.

Dr. Seeley acknowledged receipt of the list on February 28th. I quote two paragraphs from that letter:

"On behalf of the Directing Board, I wish to thank you for your prompt submission of the list of members of your medical school faculty. This list will assist our office greatly in avoiding the dislocation of essential members of your staff. The names will be retained in our files and we shall avoid inviting them to apply for commissions in the military, governmental, industrial, or other civil agencies which might desire their services.

"Should any of the members of your essential list become available in the future, kindly communicate with this office in order that our data may be kept in order. Should this office inadvertently request essential members of your staff to become dislocated, kindly delay any action on their part and communicate with me direct. The Directing Board is acutely aware of the importance of retention of adequate medical college training staffs and it is their sincere desire that all men deemed essential by you be retained in their present capacities."

I think the following conclusions can be drawn: (1) It is the present policy in national defense to consider medical schools as training centers in the program. (2) Medical students are to be deferred from military training and a minimum faculty is to be preserved. (3) Faculty lists are confidential information. They represent material for consideration between the Washington office and the dean of the particular school.

Cordially yours,

Byron L. Robinson, M. D., Dean.

SUMMER DIARRHEA IN BABIES

Casec (calcium caseinate), which is almost wholly a combination of protein and calcium, offers a quickly effective method of treating all types of diarrhea, both in bottle-fed and breast-fed infants. For the former, the carbohydrate is temporarily omitted from the 24-hour formula and replaced with 8 level tablespoonfuls of Casec. Within a day or two the diarrhea will usually be arrested, and carbohydrate in the form of Dextri-Maltose may safely be added to the formula and the Casec gradually eliminated. Three to six teaspoonfuls of a thin paste of Casec and water, given before each nursing, is well indicated for loose stools in breast-fed babies. Please send for samples to Mead Johnson & Company, Evansville, Indiana.

TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

AS LONG AGO as 1865 Villemin successfully passed the "virus" of tuberculosis from one animal to another. Twelve years later (and five years before Koch's discovery of the tubercle bacillus) von Tappeiner caused dogs to develop tuberculosis by allowing them to inhale sputum from a consumptive patient. While direct lip contact is today considered the most potent means of transferring tubercle bacilli from person to person, knowledge as to the relative dangers of indirect contact with tuberculous lungs and their secretions is still incomplete. Three recently published papers give evidence of this while, at the same time, they sharpen our perception of the manner in which bacilli get from host to victim.

TUBERCLE BACILLI ON BOOKS AND GARMENTS

Books read by consumptives probably are occasionally contaminated by sputum in the form of droplets expelled during coughing or speaking as the book is closely held to the face and at a level that any droplets expelled may readily be deposited upon the paper. Also, they may be contaminated by licking the thumb or finger when turning the pages. Transmission of infection to a second reader appears most likely to occur when the recipient with moist thumb or finger handles the contaminated page, supposedly harboring the bacilli.

There is a general agreement that large portions of the bacilli deposited upon the book pages become dry and non-viable after a short period of time. Kenwood and Dowe exposed papers to coughing patients and dried them for one month, after which the washings from the paper surfaces were inoculated into guinea pigs of which not a single animal developed tuberculosis. Other experiments of this kind point to the conclusion that while the risk of infection from books is not to be belittled, the possibility of transmission from such channels is extremely small.

The present authors permitted certain patients with advanced pulmonary tuberculosis, with uncontrollable cough and with sputum of Gaffky 6 to 8, to handle books as carelessly as possible. They coughed on the marked pages, and wet their thumbs with saliva when turning these pages. Scrapings later derived from the marked pages were collected and suspended in physio-

logical salt solution. Tuberculin negative guinea pigs were inoculated with this solution. Three of the 16 guinea pigs died from intercurrent disease and no evidence of tuberculosis could be found at the postmortem. The remaining 13 remained tuberculin negative 92 days after the inoculation, when they were sacrificed.

Another set of experiments demonstrated that the dust collected by scrapings from garments worn by patients with open tuberculosis would not infect guinea pigs. However, this failure should not give rise to a sense of false security and to a laxity of precautionary measures. The summary includes the following suggestions:

a. It seems at the present time, the best way to ease the mind of the possibility of transmission by a book which has been handled by a patient with open tuberculosis, is to store or quarantine the book for several weeks until the morbid material has completely dried, as it has been shown repeatedly that the drying robs the bacilli of their power of producing disease in animals. This measure was recommended by British Joint Tuberculosis Commission.

b. We have no suggestion of importance to make as to how the patients' garments should be disinfected. Perhaps the safest way is to expose them to the sun and air for a few days before storing away.

The Occurrence of Tubercle Bacilli on Garments and Books Handled by Patients With Open Tuberculosis, M. A. Jacobs, M. D., and S. A. Petroff, Ph.D., Quarterly Bull. Sea View Hosp., October, 1941.

TUBERCLE BACILLI IN THE HOSPITAL ROOM

Cultures were made from swabbings of bedside tables, lamps, bed frames and other articles in rooms occupied by patients at Barlow Sanatorium, also from room dust and sweepings and from cotton filters through which room air had been sucked. Uniformly negative results led to speculation as to the effect of daytime roomlight on living tubercle bacilli.

Review of the literature seems to sustain the statement of Park and Williams that: "Tubercle bacilli in sputum when exposed to direct sunlight are killed in from a few minutes to several hours according to the thickness of the layer and the season of the year. They are usually destroyed by diffuse daylight in from five to ten days. Dried sputum in rooms protected from abundant light has occasionally been found to contain virulent tubercle bacilli for as long as ten months."

For the present experiment, suspensions of virulent human tubercle bacilli in water or in sputum were spread on cover slips in 0.05 cc. amounts and allowed to dry. Some of these preparations were placed in a small unheated room in the light of an unglazed but screened north window through which the sun was known never to shine; others were kept in complete darkness within a cardboard box inside a second such box which in turn was kept in a table drawer of an unheated room. This was done during a clear, dry period in mid-winter at Los Angeles. (Technics are described in detail.)

A second set of tests was run in the early spring during cloudy and rainy weather and a third set of tests in mid-summer. The following winter, viability was tested also in the electric refrigerator.

The viability of tubercle bacilli was determined by animal inoculation and by culture.

1. Dried tubercle bacilli survived unfiltered north roomlight from four hours to five days under varying conditions. They were non-viable, according to the methods of recovery used, at one to twelve days; not established in one case.

2. Viability in the dark was from less than forty days to between three and one-half and five months.

3. Viability in the refrigerator was between six and one-half and fourteen months.

4. Tubercle bacilli were more readily recoverable and after longer periods of exposure when the dose deposited was larger.

5. They lived longer in smears made from sputum than from water suspensions.

6. They lived longer in the winter than in the spring and summer.

7. Variations in relative humidity and periods of partial cloudiness had no effect on viability.

8. Unfiltered daytime roomlight probably plays a very important role in preventing cross-infection and in protecting the employees of tuberculosis sanatoria.

Survival of Tubercle Bacilli, C. Richard Smith, M. D., *Amer. Rev. of Tuber.*, March, 1941.

TUBERCLE BACILLI IN THE AUTOPSY ROOM

Two incidents seem to have prompted this study: The isolation of acid-fast organisms from the surface of eyeglasses worn during an autopsy on an active case of tuberculosis; and the observation that the incidence of tuberculosis among medical students appears to be proportional to their contact with autopsy material during the second year in medical school. The compression of the crepitant lung, causing expulsion of minute amounts of bacteria-laden air, might simulate a human cough and thus be responsible for the dissemination of bacteria.

Lungs from patients who died from tuberculosis were sectioned in the usual manner, the trachea was opened, regional lymph nodes were examined and all cavities were opened with scissors. This was done under a shield, equipped

with a glass plate situated eight inches directly above the specimen. After a 15-minute examining period the plate was washed with sterile saline solution.

The growths which were obtained from the washings lead to the conclusion that methods of examination which make use of a compression technic contaminate the atmosphere in the vicinity of the autopsy and that fresh tuberculous lungs are decidedly dangerous, and are a potent source of atmospheric contamination against which methods of proper protection should be devised.

The Dissemination of Tubercle Bacilli From Fresh Autopsy Material, Ruell A. Sloan, M. D., *N. Y. State Jour. of Med.*, January 15, 1942.

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EDITORIALS

NEW PHYSICAL STANDARDS FOR THE ARMY

For the information and guidance of our members who will be asked about the Army's new physical standards of acceptance for **limited military duty for officers**, we republish the following regulations, detailed in an order issued by the surgeon general of the Army, as published in the J. A. M. A. for March 28:

A man who has lost one leg, provided it is below the junction of the middle and lower thirds of the thigh and has been replaced with a satisfactory artificial one, may now be considered acceptable for limited service as an officer of the supply arms and services of the Army.

A wide variety of physical defects which heretofore have stood as a barrier to service in the Army is listed in the order as being considered acceptable for limited service with waiver, and in addition there are enumerated a number of conditions on which waiver may be accepted for general military service.

The order is divided into three sections. The first concerns those defects considered acceptable for limited service. These include:

Overweight to 25 per cent above average weight for age and height, and underweight to 15 per cent below ideal weight, provided chest X-ray examination is negative for disease changes of the lungs and other chronic disease is carefully excluded.

Vision 20/400 in each eye corrected with glasses in possession of the examinee to 20/20 in one eye and to at least 20/40 in the other, provided no organic disease of either eye exists.

Blindness, or vision below 20/400, in one eye, with vision 20/100 corrected with glasses in possession of the examinee to 20/20 in the other, provided there is no organic disease in the better eye and no history of cataract or other disease in the more defective eye which might be expected to involve the better one, and provided that, in case of the absence of an eye, the individual is fitted with a satisfactory artificial one.

Complete color blindness.

Hearing 5/20 in each ear for low conversational voice, or complete deafness in one ear with hearing 10/20 or better in the other, provided the defect is not due to active inflammatory disease and is stationary in character.

Loss of one hand, forearm, or lower extremity, provided the lost member is replaced with a satisfactory artificial one.

Flatfoot, excessive curvature of the sole of the foot, or a clubfoot in which the individual walks on the toes due to elevation of the heel by contraction of the Achilles tendon, provided the condition is asymptomatic and does not interfere with normal locomotion.

Joints fixed or limited in motion, provided the condition is the result of injury and is non-symptomatic.

History of gastric or duodenal ulcer, provided there is a trustworthy history of freedom from activity during the preceding five years and provided an X-ray film of the gastrointestinal tract at the time of examination is negative.

The second section of the order concerns conditions considered unacceptable for any service, and include:

History of malignant disease within the preceding five years; syphilis, except when adequately treated; instability of the major joints; diabetes of any degree; history of any psychosis.

The third section concerns those conditions which may be recommended for general military service with waiver. They include:

Confirmed positive serologic tests for syphilis with no clinical evidence of the disease, with reliable histories of treatment for the disease, and provided that a negative spinal fluid since infection and treatment has been reported from a trustworthy source.

Overweight to 20 per cent above average weight for age and height, and underweight to 12.5 per cent below ideal weight, provided X-ray of the chest is negative for tuberculosis and other chronic disease is carefully excluded.

Insufficient incisor or masticating teeth, provided the mouth is free from extensive infectious processes and satisfactory dentures are worn.

PROCEEDINGS OF SOCIETIES

The Southeast Arkansas Medical Society met at Eudora March 18th, the following program being presented after dinner: "The Early Diagnosis of Cancer," J. S. Wilson, Monticello; "Differential Diagnosis of Kidney Diseases," Grady Reagan, Little Rock, and "Coronary Heart Disease," S. C. Fulmer, Little Rock.

The Benton County Medical Society met in dinner session at Bentonville April 9th for the following program: "The Heart," Wm. M. Kinney, Joplin.

M. W. Chastain, Secretary.

The Second Councilor District Medical Society met in dinner session at Searcy April 13th for the following program: "General Principles of Diagnosis," J. N. Compton, Little Rock. The society will next meet at Batesville.

O. J. T. Johnston, Secretary.

COMING MEDICAL MEETINGS

First Councilor District Medical Society, Tyrone, May 7th.

American Medical Association, Atlantic City, June 8th-12th, 1942.

VITAMIN FILMS IN COLOR

Eli Lilly and Company, Indianapolis, announces the release of three 16-mm. silent motion pictures in color descriptive of vitamin deficiency diseases. The films are available to physicians for showing before medical societies and hospital staffs. One deals with thiamine chloride deficiency, one with nicotinic acid deficiency, and the third with ariboflavinosis. The major part of all films concerns the clinical picture presented by the patient with reference to treatment by diet and specific medication. They do not contain advertising of any description, nor is the name of Eli Lilly and Company mentioned.

The films were made at the Nutrition Clinic of the University of Cincinnati at the Hillman Hospital, Birmingham, Alabama, where studies were initiated in 1935, under the joint auspices of the Department of Internal Medicine of the University of Cincinnati and the University Hospitals of Cleveland. Subsequently, these investigations became a co-operative project between the Departments of Medicine of the University of Cincinnati and the University of Alabama, and the Department of Preventive Medicine and Public Health of the University of Texas.

PERSONALS AND NEWS ITEMS

Dr. and Mrs. Virgil Payne, Pine Bluff, spent a recent vacation in Florida.

R. H. Whitehead has been elected president of the DeWitt Rotary Club.

Malcolm Galbraith, vice-president and director of sales of the Upjohn Company, died Friday morning, April 10, in Kansas City. Mr. Galbraith was born in Bowmanville, Ontario, Canada, October 23, 1876. He received his bachelor of pharmacy degree at Ontario College of Pharmacy in 1898, entering in the drug business in Ontario the same year. He later became a naturalized citizen of the United States. In 1909 he left the H. K. Mulford Company, of Philadelphia, to join the Upjohn Company. In October, 1929, he was elected to the board of directors and named director of sales. He was made vice-president of the company in May, 1936.

J. R. Kitley has been re-elected mayor of Mayflower for the 17th consecutive term.

Among those in attendance at the Congress of Obstetricians and Gynecologists in Saint Louis were: Clyde D. Rodgers, Chas. R. Henry, Margaret Kearney, Little Rock; I. F. Jones, Fort Smith; J. T. Robison, Texarkana; and Ruth Ellis Lesh, Fayetteville.

H. O. Walker has been re-elected mayor of Newport for the 4th consecutive term.

L. D. Massey, Osceola, recently took post-graduate work at the University of Minnesota and attended the sessions of the American College of Physicians in Saint Paul.

W. B. Grayson, Little Rock, has been elected president of the State and Territorial Health Officers' Association.

M. W. Chastain has been elected president of the Bentonville Rotary club.

Chas. S. Holt, Fort Smith, attended the recent session of the Mid-West Hospital Association at Kansas City.

Carl L. Wilson, Fort Smith, has been called to active duty with the Army Medical Corps and assigned to Station Hospital, Fort Sam Houston, Texas.

The February issue of the Tri-State Medical Journal was the Pine Street Hospital, Texarkana, edition and contained the following: "The Roentgenological Examination of Duodenal Ulcer," Charles H. Frank; "Surgical Phase of the Treatment of Duodenal Ulcer," William Hibbits, and "The Diagnosis and Medical Management of Duodenal Ulcer," George W. Parson.

J. D. Riley, State Sanatorium, served as chairman of the recent "Early Diagnosis Campaign" of the Arkansas Tuberculosis Association.

BORN—To Dr. and Mrs. J. T. Herron, Helena, a son, on March 18, 1942.

MARRIED—On April 4th, Lt. H. A. Stroud, Jr., Camp Robinson, and Miss Lucile Adams, Little Rock.

N. T. Hollis, Little Rock, attended the recent postgraduate course sponsored by the American Psychiatric Association at Saint Joseph, Missouri.

B. C. Routon has been elected a director of the Ashdown Rotary club.

Capt. J. W. Branch, formerly of Hope, has been transferred from March Field, California, to Camp Chaffee, Arkansas, for a duty in the office of the Division Surgeon, 6th Armored Division.

F. A. Boomer has moved from Mulberry to Van Buren.

R. E. Schirmer, Fort Smith, has been called to active duty as 1st Lieutenant Army Medical Corps, and assigned to Station Hospital, Camp Chaffee.

RANDOM THOUGHTS OF THE SECRETARY

April 7th. Meeting with the NYA at a site adjacent to Little Rock's Zoo and winter carnival quarters, departing the conference just too late to catch the afternoon train home, riding to Russellville to repeat the incident and finally home this rainy night by bus. For the first time in months we attend a picture show and find it a relatively comfortable way to spend the two hours we are forced to wait.

April 11th. This afternoon aboard the Southern Belle which has given up nurse hostesses to the military, a concession highlighted by the many uniforms on the train. Many more soldiers in the Kansas City Union Station and it appears that this modern stream-lined army is certainly one of movement.

April 12th. Arriving Omaha where the lack of a top-coat is keenly felt and in attendance throughout the day on a procurement conference with but one of 27 state chairmen absent. A boost for the Fontenelle, Omaha's welcome to the world, where you receive freshly laundered and polished silver change at the cashier's desk, decidedly an innovation in hotel attention-getting practices. Away at five, making our Kansas City connection by seconds and early to bed for that 5:30 arising hour in Oklahoma tomorrow morning.

April 13th. Making good use of Earle Hunt's tires we visit the Second Councilor District at Searcy finding that the personnel at the Hawkins' Hospital believe in him and will have none of our belittling although we wonder what they would think if they knew he gave the speakers the wrong date. Enjoying a Mayfair good dinner and the discussion over the papers of Mobley and Compton, we bring the session to adjournment by talking on procurement. Riding to Clarksville we play the unusual part of a listener and find the miles from Clarksville to home a bit lonely after Earle's enthused conversation over the rest of the way.

April 14th. The county society goes "OB and GYN" tonight with Adams and Jones as speakers, to whom, we affirm for the record, we listened in an attentive manner without heckling remark. Col. Soper, from Camp Chaffee way, turns up as a gynecologist, departing from scientific discussion sufficiently long to encourage the society to furnish a recreation room at the Station Hospital, a "touch" deserving of commendation.

SUMMER DIARRHEA IN BABIES

Casec (calcium caseinate), which is almost wholly a combination of protein and calcium, offers a quickly effective method of treating all types of diarrhea, both in bottle-fed and breast-fed infants. For the former, the carbohydrate is temporarily omitted from the 24-hour formula and replaced with 8 level tablespoonfuls of Casec. Within a day or two the diarrhea will usually be arrested, and carbohydrate in the form of Dextri-Maltose may safely be added to the formula and the Casec gradually eliminated. Three to six teaspoonfuls of a thin paste of Casec and water, given before each nursing, is well indicated for loose stools in breast-fed babies. Please send for samples to Mead Johnson & Company, Evansville, Indiana.

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* J. A. M. A., 93:1110 — October 12, 1929

Brückner, H—Die Biochemie des Tabaks, 1936

**The Military Surgeon, Vol. 89, No. 1, p. 7,
July, 1941

SEND FOR REPRINT of an important contribution to medical literature—"The Ciga-
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analysis reveals many new angles about smoking that should be valuable to you
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WOMAN'S AUXILIARY PAGE

MRS. RALPH CROSS, Publicity Secretary, Texarkana

NUTRITION NOTES

In studying material for nutrition programs, I found the following facts, some of which I did not know; others had slipped my memory. So I thought Auxiliary members might enjoy a little review.

We are all conscious of sugar today due to the ration. Did you know during the last century the consumption of sugar in this country has increased tremendously until today it averages over two pounds per person a week, more than four times the amount suggested by nutritionists as a reasonable maximum. The reason for this limitation is that sugar provides none of the protein, mineral and vitamins needed to promote growth and to build muscle, teeth, bones and vitality. It contributes only energy value and flavor to the diet.

The Benefits of Salt. When temperatures are high and people perspire freely, heat prostrations may result if the salt and moisture lost in perspiration are not replaced regularly and in adequate amounts. Industrial plants, such as steel mills, in which men work at excessive heat, learned some years ago that the simple expedient of providing salt tablets at drinking fountains would almost entirely eliminate heat prostration among employees. The general public can well profit from their experience. When the thermometer soars into the nineties and higher this summer, sprinkling extra salt on food to replace the salt which has been lost, and using generous amounts of drinking water or other liquids, should provide help in avoiding danger from exhaustion during the hot spell.

Did you know that—A half cupful of grapefruit and orange juice furnish the same amount of vitamin C but the cost of the orange juice, either canned or fresh, is almost double.

A half cupful of tomato juice furnishes only half as much vitamin C as the citrus fruit; the cost is a little more than grapefruit and a little less than orange juice.

A half cupful of pineapple juice furnishes about a fourth as much vitamin C as grapefruit juice, and the cost is nearly twice as much. Thus, vitamin C purchased in pineapple juice, costs about eight times as much as that purchased in canned grapefruit juice. The two cupfuls necessary to give a daily protective amount would be expensive, and impractical to take, especially for babies and small children.

Prune juice, which is sometimes served as a breakfast juice, cannot be compared with the other juices because it does not furnish vitamin C. It is valuable for the iron it supplies, and for its laxative quality, but when it is used, some source of vitamin C must be used also, if health is to be protected.

Many grown people who believe implicitly in the importance of the statement "a quart of milk a day for every child," seemingly attach no significance, for themselves at least, to the equally familiar and equally important "a pint of milk a day for every adult." Since milk is well known for the bone and tooth building calcium it furnishes, its importance for growing children is obvious. Grown people, too, need this kind of protection, for, if the reserves of calcium are not constantly renewed, fragility of the bone may occur. This is one reason why the bones of elderly people break so easily.

Of perhaps more general concern, when calcium reserves from bones and teeth are gone, is a feeling of

lassitude, for which seems no explanation. It may be accompanied by interference with the normal activities of various organs. The importance of calcium for all body functions is not so commonly known, functions which are as essential to adults as to children.

Calcium, controls the contracting and relaxing of all muscles. This is particularly important for the regular and normal beating of the heart.

Calcium is an important factor in the coagulation of the blood. Without this protective mechanism any wound, however slight, would threaten death by bleeding.

Calcium helps to regulate digestion, circulation, respiration.

Calcium helps to maintain vitality and predisposes of longevity.

Calcium helps to control the sensitivity of nerves.

Calcium helps all other mineral elements do their best work. For instance, the body can get along on a smaller amount of iron when there is a generous amount of calcium.

Calcium is a real policeman helping to keep all other factors on the job. The recommended pint of milk a day for every adult will furnish the amount of calcium needed by normal adults, though in special cases, such as convalescence and pregnancy, more is required. And for good measure, milk will also supply valuable protein; easily assimilated iron; and quite generous amounts of vitamins A, B, and G.

Speaking of Vitamins. A prominent doctor, speaking recently before the annual congress of the American College of Surgeons, recommended that whenever necessary, surgical patients spend a few days before an operation in nutritional preparation. The procedure should mean hospitalization, and a well rounded diet would be provided with special emphasis on vitamins A, B, C, and K. The reason for the emphasis is evident.

Vitamin A, the anti-infective vitamin, builds up resistance against possible post-operative infection, such as pneumonia and peritonitis.

Vitamin B, the digestion and nerve protector, aids in the regeneration of red blood cells and promotes general well being.

Vitamin C, which strengthens the capillaries, aids in the rapid healing of wounds and lessens the chance of wound rupture.

Vitamin K, which shortens the time in which the blood will clot, is essential for the prevention of hemorrhage.

Each person's daily food plan should include:

4 cupfuls of milk.

At least one orange or its equivalent in other fruit.

A cooked, whole grain cereal for breakfast.

1 egg.

1 or 2 servings of potatoes.

At least one serving of another vegetable, with a dark green leafy vegetable several times a week.

Bread and butter with every meal, at least half of it whole wheat.

A serving of meat, fish, a cheese dish, or dried peas or beans.

Only enough sugar to flavor puddings, apple sauce and the like.

At least a teaspoonful of cod liver oil, or its vitamin equivalent in a concentrate.

(MRS. FRED) DOROTHY C. HAMES.

Mrs. B. L. Ware and Mrs. C. W. Hall, Greenwood, were hostesses April 13th for the April meeting of the Sebastian County Medical Society Auxiliary at a 1 o'clock luncheon and social meeting at the Greenwood Colonial Hotel.

Mrs. Charles T. Chamberlain, Auxiliary president, conducted a short business session, with reports by committee chairmen. Mrs. Chamberlain appointed a nominating committee, to draw up a slate of officers for presentation at the May meeting. Mrs. Everett Moulton is chairman of the committee. Other members are Mrs. J. S. Southard and Mrs. W. R. Brooksher, Jr. Delegates and alternates were elected to attend the state meetings of the Arkansas Medical Society and Auxiliary to be held April 27, 28, 29 in Hot Springs.

Mrs. Chamberlain, by virtue of her office, will be a delegate. Other delegates are Mrs. S. J. Wolfermann, Mrs. W. R. Brooksher, Jr.; alternates, Mrs. C. W. Hall and Mrs. B. L. Ware, of Greenwood.

Mrs. S. J. Wolfermann, county commander of the Women's Field Army of the American Society for the Control of Cancer, reported on a membership drive held in Fort Smith last week at which \$475 was contributed through dollar memberships. The report is incomplete. Mrs. Wolfermann said, pending further reports from captains and teams.

The hostesses arranged a patriotic setting for the table appointments at the luncheon, with a red, white and blue theme expressed in decorations.

Members of the Auxiliary present were Mrs. Chamberlain, Mrs. Wolfermann, Mrs. W. R. Brooksher, Jr., Mrs. Everett Foster, Mrs. W. J. Nelson, Jr., Mrs. James Elkins, Mrs. Kenneth Thompson, Mrs. Walter Eberle, Mrs. S. P. Stubbs, Mrs. W. F. Rose, all of Fort Smith; Mrs. B. B. Bruce, Alma; Mrs. G. G. Woods and Mrs. Earl Woods, Huntington, and the hostesses.

MRS. W. F. ROSE, Publicity Chairman
of the Auxiliary to the Sebastian
County Medical Society.

At the beginning of the year of 1941-42, when I was installed as president of the Auxiliary to the Arkansas Medical Society, I expressed my deep appreciation for the honor bestowed upon me. Twelve months later, I again wish to express my appreciation for a grand year filled with new friendships, happy memories, and a feeling of pleasure that you, the women of the Auxiliary, considered me capable of holding such an honored position.

I want to thank every state officer and committee chairman, all county presidents, councilors and members of the Auxiliary for their cooperation, their loyalty, and their friendliness.

The Advisory Board, composed of Dr. J. J. Monfort, Dr. E. C. Moulton, Dr. M. L. Dalton, Dr. R. L. Taylor, Dr. T. Duel Brown, Dr. W. M. Parker, and Dr. C. A. Rosenbaum, along with Dr. H. Fay H. Jones, president of the Arkansas Medical Society for 1941-42, and Dr. W. R. Brooksher, secretary of the Arkansas Medical Society, have been most helpful in every way, and I wish to thank them for their courtesy and kindness.

In the Auxiliary it is now time for a new leader, a change in leadership, but not of ideals. Trends of the

times change our thoughts and our standard of living perhaps, but fundamentally our Auxiliary work remains the same—that of ascribing to and promoting the principles of the American Medical Association.

For your new leader, Mrs. L. G. Fincher, I bespeak the same loyal cooperation you have shown me, and in even greater abundance, for each year brings added responsibilities.

Under the splendid leadership of Mrs. Fincher and the fine group of women elected to serve along with her, Arkansas shall continue to progress in Auxiliary work.

Sincerely,

MRS. C. A. CHURCHILL, President.

The Tri-County Medical Auxiliary met at the home of Mrs. Jim McKenzie in Hope, on the afternoon of March 20th, with the president, Mrs. L. W. Kennedy presiding. It was voted to suspend further activities for the duration of the war, with a recommendation that each of the three counties organize their own Auxiliaries.

Immediately following this action, the Hempstead Medical Auxiliary was organized with Mrs. Don Smith as president and Mrs. J. G. Martindale as secretary-treasurer. It was decided to observe "Doctors' Day" with a dinner and plans were made for the occasion.

On the following Thursday, the private dining-room of the Barlow Hotel provided the setting for a perfectly appointed dinner given by the newly-formed Hempstead County Medical Auxiliary in honor of the Hempstead County Medical Society and in celebration of "Doctors' Day."

The large circular table held as a central ornament a huge crystal bowl containing mixed garden flowers. Replicas of the arrangements flanked the centerpiece and matching boutonnieres were presented to the doctors.

Mrs. Don Smith presided and presented Mrs. J. G. Martindale, who told the purpose of the meeting and the history of "Doctors' Day."

Covers were laid for Dr. and Mrs. Don Smith, Dr. and Mrs. Ed Budd, Dr. and Mrs. Jim McKenzie, Dr. and Mrs. L. M. Lile, Dr. and Mrs. J. G. Martindale, Dr. J. H. Weaver, Dr. P. B. Carrigan, Dr. and Mrs. Heller, of Mena.

MRS. J. G. MARTINDALE, Secretary,
Hempstead County Medical Auxiliary.

The Auxiliary to the Jefferson County Medical Society elected Mrs. Fred Hames president, succeeding Mrs. John K. Walker, at the monthly meeting of the group Friday at the home of Mrs. W. T. Lowe.

Other officers were named as follows: Mrs. Hunter Causey, vice-president, succeeding Mrs. J. C. Beard; Mrs. William Snodgrass, secretary, succeeding Mrs. Causey; Mrs. J. S. Spillyards, treasurer, re-elected; and corresponding secretary, Mrs. W. H. Bruce, re-elected.

At the same time, Mrs. Hames, the incoming president, and Mrs. Walker, the retiring president, were named delegates to the state convention April 27-29 at Hot Springs.

Dr. C. H. Frank, radiologist, gave an interesting and instructive talk on "Cancer Control" at a meeting of the Bowie-Miller County Medical Auxiliary recently. Mrs. L. H. Lanier, president, presided at the meeting. The program included two vocal selections. Health posters made by Texarkana school children were displayed and prizes were awarded. It was announced that, for the second successive year, Mrs. Ralph Cross, Hygeia chairman, had won a prize check for twenty-five dollars in the National Hygeia Contest.

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JUNE, 1941—MAY, 1942

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BOOK REVIEWS

Synopsis of Genitourinary Disease: By Austin I. Dodson, M. D., F. A. C. S., Professor of Genitourinary Surgery, Medical College of Virginia, etc. Third edition. Pp. 302. 112 illustrations. Price \$3.50. Saint Louis: C. V. Mosby Company, 1941.

A synopsis of urology is of value with the voluminous literature now at hand. The author stresses diagnostic methods and etiology and in this third edition, has revised the section on the formation of urinary calculi and brought the field of chemotherapy up to date.

Arthritis in Modern Practice: By Otto Steinbrocker, B. S., M. D., Assistant Attending Physician and Chief, Arthritis Clinic, Bellevue Hospital, Fourth Medical Division, New York City. With Chapters on Painful Feet, Posture and Exercises, Splints and Supports, Manipulative Treatment and Operations and Surgical Procedures by John G. Kuhns, A. B., M. D., F. A. C. S., Chief of the Orthopedic and Surgical Service, Robert Breck Brigham Hospital; Assistant Visiting Orthopedic Surgeon Boston Children's Hospital. 606 pages with 321 illustrations. Philadelphia and London: W. B. Saunders Company, 1941. Price \$8.00.

This is a well-written book and presents in a concise manner the present-day conceptions of the various aspects of the arthritic diseases. Five chapters by Dr. J. G. Kuhns on painful feet are a valuable addition. This is an especially valuable text, complete in discussion and without unnecessary detail.

The 1941 Yearbook of General Surgery. Edited by Evarts A. Graham, A. B., M. D., Professor of Surgery, Washington University School of Medicine; Surgeon-in-Chief, of the Barnes Hospital and of the Children's Hospital, Saint Louis. Pp. 768. Price \$3.00. Chicago: The Yearbook Publishers, 1941.

This volume follows the standardized and satisfactory arrangement of previous years covering the entire field of general surgery. These volumes are well established and maintain uniform excellence in their special field over the years.

A Manual of Pharmacology: By Torald Sollman, M. D., Professor of Pharmacology and Materia Medica in the School of Medicine of Western Reserve University, Cleveland. Sixth edition, entirely reset. 1,298 pages. Philadelphia and London: W. B. Saunders, Company, 1942. Price \$8.75.

This authoritative volume appears in the sixth edition as a welcome aid to physicians who depend upon it for a proper evaluation of many remedial agents. Of interest with sugar rationing in the offing is the discussion on saccharin. Physicians may depend upon this book to discount the many absurd and extravagant claims made for various drugs. The general plan of the book is to describe all the actions of a drug with a discussion aimed

at providing a better understanding of the direct bearing on medical practice. Only the more important preparations are described, regardless of their official status.

Infant Nutrition: By W. McK. Marriott, B. S., M. D., Late Professor of Pediatrics, Washington University School of Medicine, Saint Louis. Revised by P. C. Jeans, A. B., M. D., Professor of Pediatrics, College of Medicine, State University of Iowa. Third edition. Pp. 475. Price \$5.50. Saint Louis: C. V. Mosby Company, 1941.

This widely known and popular text has been revised to include the remarkable progress in this field. The space devoted to vitamins is greatly increased. This is a most practical book for practitioners.

Diseases of Women: By Harry Sturgeon Crossen, M. D., F. A. C. S., Professor Emeritus of Clinical Gynecology, Washington University School of Medicine, Saint Louis, and Robert James Crossen, A. B., M. D., Assistant Professor of Clinical Gynecology and Obstetrics, Washington University School of Medicine, Saint Louis. Pp. 948. 1,127 illustrations. Saint Louis: The C. V. Mosby Company, 1941.

The popularity of this book is shown by the fact that this is the ninth edition. The necessity for this edition is most marked in view of the great strides that have taken place in the intensive study of physiology. The increased knowledge of hormone and endocrine activity which relate to gynecology have increased tremendously. This increased knowledge of physiology has led to quite a change in the diagnosis and treatment of these various gynecological conditions. The Doctors Crossen present the subject-matter in such a manner that it is easily understood and assimilated and, in addition, there are many colored drawings and photographs which enable one to follow the physiology of the hormone as it is presented today.

A Textbook of Surgery by American Authors: Edited by Frederick Christopher, B. S., M. D., F. A. C. S., Associate Professor of Surgery, Northwestern University Medical School; Chief Surgeon, Evanston (Illinois) Hospital. Third edition completely revised and reset. 1,764 pages with 1,538 illustrations on 771 figures. Philadelphia and London: W. B. Saunders Company, 1942. Price \$10.00.

This relatively new text on surgery edited by Dr. Christopher has undergone its third revision. The subject-matter is presented by 195 authors who are for the most part engaged in teaching positions as well as active practice. This type of editing affords authoritative presentation of the field of surgery. In this book coverage is pleasingly complete and practical. Helpful illustrations are freely used.

Possibly the most important change over the last edition is the incorporation of a chapter on War Injuries. It is brief but valuable. The sulfonamides, proving of ever increasing usefulness, are considered in the therapy of appropriate conditions.

This volume of surgery, by right of coverage and completeness, held to practical limits, authority, and up-to-dateness, is a worthy addition to the practitioner's library as well as the students.

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No. 1

THE MEDICAL PROFESSION: ITS OPPORTUNITIES FOR SERVICE TODAY*

H. FAY H. JONES, M. D.
Little Rock

Sixty-seven years ago the Arkansas Medical Society was organized. Throughout the years that event has stood as a major and lasting accomplishment. We are proud of our state society and of the progress it has made. This progress has been steady. Our scope of activity has broadened until our organization maintains a place which it holds jealously among larger organizations, and I deem it a privilege to have been honored as your President the past year. For this honor I express my profound gratitude.

I welcome each of you to this meeting. May your stay be happy and profitable. I truly hope that each of you feels the same thrill in attending the Annual Meeting that I do. There is not only the pleasure of the association as we meet together, but also there is a renewal of that inspiration which is so essential to the successful accomplishment of our work.

I wish to express my sincere thanks to the Garland County Medical Society which has worked so diligently to prepare and execute plans for this meeting; to all committees and individuals, who, in any way, have contributed to its success; and to the hotel management for its cheerful and efficient cooperation. I also thank the men who are to appear on our program, during these days.

The reins which I surrender to my successor, Dr. Robins, will carry a greater responsibility than that placed on me. The problems confronting the Medical Profession become more and more complex. These are strenuous days. The war activities that our country is engaged in, and the subsequent changing conditions, bring to us unusual and exacting demands. I fully appreciate the cooperation that I have received from you and I urgently request that we all, each and every

one of us, cooperate to the fullest extent with our new President, in order that his tasks may be lessened and the Medical Profession may be best served. There is no progress without cooperation. In an organization of this type we must be big enough to forget all our petty differences and work together for a common good. The time is here when we must all hang together as a profession or we shall surely hang separately.

To plans which would benefit the people we serve, we must offer our wholehearted and unselfish support, and we must oppose unsound doctrines which would eventually lower the standards of medical service to that found in other countries, where the physician is made subservient to political control. As I have told you throughout the year, we see more and more evidences of attempted National Health and Hospitalization Insurance Legislation. Proponents are determined to show that broad health measures are necessary to the security of the United States, and we can well wonder whether the war drive will be used to carry through legislation for a full-fledged United States system of National Sickness Insurance. Consideration has been given by the Social Security Board to various proposed methods for providing medical care. Latest information from Washington indicates that the zero hour may be at hand. The opening shot was President Roosevelt's request, in his budget message to Congress, for "an addition of permanent and temporary disability payments and hospitalization payments beyond the present benefit programs." In the same message, the President laid even heavier stress on the need for extending unemployment insurance benefits. It is through the avenue of unemployment insurance that the majority leaders in Congress are working toward the Administration's objectives in the health field. Today's headlines scream: "Finance Defense Through Social Security Plan," "Big Increase in United States Payroll Taxes Forecast," "Disability Benefits Proposed." In the face of manifold evidences let us not be so naive as to deny that the advocates of socialism are taking

* President's Address, Sixty-seventh Annual Session, Hot Springs National Park, April 27, 1942.

advantage of this hour of national peril to unload upon America a system of compulsory health insurance. Unless we move decisively, it will be too late. Under the guise of National Defense we will have been sold down the river of socialism.

State or Government Medicine, the soft sounding sophistry of prepayment medical care, must not be permitted to divide the ranks of the profession but must stimulate us to study together the far reaching effects of these innovations in countries where they have ceased to be an experiment, and then to stand unitedly for the things that will bring the greatest good to the sick. We, as a profession, must be willing to stand or fall by the standard of the best service to the sick in body, in mind, and in soul; but it is our sacred duty as the only trained and experienced experts on this subject to have a big voice in the arrangements by which it is done. I urge each of you to avail yourself of the Journal of the American Medical Association and keep posted on the contemplated National Medical Legislation. Our Secretary, Dr. Brooksher, has sent out bulletins to each County Society all through the past year on such contemplated legislation. Many of you at the time of receipt of these bulletins have immediately contacted your Senators and Representatives in regard to the reaction of the Medical Profession on these matters, but some have been derelict in doing this. I urge upon you the great necessity of immediate action on these contemplated regulations. I call upon the Arkansas Medical Society to present an unbroken front against subversive forces in order that this beloved country of ours may continue to be the leader of all nations in the advancement of the Science and Art of Medicine in its service to ALL the people. Let us consecrate ourselves to the cause of medicine and rally to the standards of our rules of professional conduct.

Progress is not automatic. The world grows better because there are high-minded souls who will that it should, and because they will and dare to take the right steps to make it better. We physicians have a vital work to do in the maintenance of the health of a nation. No one physician can do the work of preserving and maintaining health, no two physicians can do it, any more than one soldier or two soldiers can defend a nation. It takes an all-out effort, a concentration of united strength. It is my firm belief that our objectives are not beyond the attainable, and can be realized by mutual agreement among the various interests and organized medicine. As I see it, our prime purpose is to

have our Medical Society fulfill the spirit and substance of service formed on loyalty and tradition. Thus, may our vision of the past become the reality of today, and the guiding star of the future.

Opportunities for advancement and accomplishment are always with us. The man himself is the best part of the opportunity. Opportunity is living correspondence with one's environment. Where there is no correspondence there is no opportunity. For ages the exhaustless resources of America lay unknown and unutilized, because the right kind of man was not here. The Kimberly diamonds were but worthless pebbles, the playthings of the children of savages, until they chanced they fell under the eye of one who knew how to look. In no field is the opportunity for education, for service, and for making ourselves men, more fertile than in the Medical Profession, for to us is entrusted the guarding of our most precious possession—Health.

Let us consider some of the opportunities in the Medical Profession and let us dedicate ourselves to the preservation of these opportunities to those who follow us in the practice of our noble profession.

1. The Medical Profession Has the Opportunity of Furnishing the Example of Good Citizenship.

A good citizen is a man or woman who is doing something of service to the community. A good citizen is a workman who need not be ashamed. There is no fitting place in society for the selfish and the greedy, and we will see to it that only insofar as the range and circle of our duties may include others will we find the true joy of living.

2. The Medical Profession Has the Opportunity of Safeguarding the Health of the Community and State.

The Medical Profession has done more for the human race than has ever been accomplished by any other body of men. These gifts to the people have come in the form of vaccination, sanitation, anesthesia, asepsis, surgery, the science of bacteriology, the art of therapeutics, etc. Like a team of two horses slowly pulling a car out of the mire, the general practitioner and the specialist are, side by side, slowly but surely liberating the human race from the depths of disease. Their combined value cannot be measured in dollars and cents, but rather in years of additional life. Together they constitute the greatest team on earth.

Medical Science has reduced the mortality rate about one per cent a year for the last thirty years, and, as a result, 600,000 more persons are alive today than would be if public health conditions of 1900 existed. We are proud to say that the United States is the most healthful nation in the world. Our span of life is longer than that of the people of any other country. All this is due to our American system of Medicine. The letters, "M. D.," are a symbol of civilization's achievement in protecting humanity.

3. The Medical Profession Has an Opportunity of Setting an Example of Sympathy, Charity, and Human Kindness.

In each generation some of the best minds have devoted themselves to the study of Medicine. This will always be so. There is an allure to the practice of medicine which keeps the conscientious physician struggling for his patient in the face of any difficulty. I like to believe that it is an inherent love of human kind, which makes life's ultimate goal the universal brotherhood of man.

The doctors of our country, men and women of all ages, have been trained in a wide variety of institutions. We are all alike, though, in certain qualities. We have been willing to spend years in hard preparation. We still have the attitude of students, and are seeking for more and more knowledge all of the time. We all realize that we have as a main responsibility the personal care of individuals. Everything we do has an intimate relationship to the organized society in which we live. Above all, we are alike in being good individuals. We have to be. Those who succeed want us to be. When we are called to a bedside the patient wants all of our attention and knowledge focused upon him and his problems.

4. The Medical Profession Has the Opportunity of an Interesting Future.

With the greater knowledge of the causes of disease which time will bring us, there will be put into the hands of the physician of the future a weapon far more powerful than any we can wield today. We may reasonably look forward to the time when many of the evils which afflict us will be avoidable, and as a result, the span of life of man, which even in our own time has extended beyond that of a hundred years ago, will be stretched several decades beyond the three score years and ten, that at one time were allotted to man.

These opportunities for the development of Medical Science and Medical Service must remain unhampered and it is to this cause that this

generation of doctors must dedicate our efforts. Our country and the Medical Profession must keep the flame of scientific research burning at this time, for only here is such now possible.

At this particular time the Medical Profession has been given the Opportunity for Leadership and Service in the National War Program.

In this program every doctor is going to be used in some capacity, either in the armed forces, or in the provision of Medical Service to industry, or in the provision of Medical Service to the civilian population.

National health is an extremely important problem, even in peace time, and it is greatly emphasized in war time. Patriotism calls us now to sacrifice. Many from our ranks have been called into active military service. Many more will follow. Each of us who remains behind will shoulder willingly any added responsibility placed on him by their going.

It is estimated that approximately seven thousand physicians will be needed for each one million men under arms. The Procurement and Assignment Service has issued a call to all physicians to hold themselves in readiness, and to register their special qualifications. All physicians who are now ready for immediate service in the Army and Navy have been asked to enroll. Response to this request has been highly gratifying. The doctors of this country have never had to be conscripted into service and the demand for doctors for the armed forces will again be met without any conscription measure. However, these physicians must be selected for military service in such a way as to least disrupt the distribution of physicians in our country.

The provision of medicine to industry assumes important and difficult proportions. Modern military activity depends basically on the efficient coordinated industrial production. In warfare, as now waged, the mental and manual work of twelve is necessary to maintain one active combatant in the field. Loss of working time by indispensable, skilled craftsmen then must be regarded as war-time casualties equal in importance to those which occur in actual combat. The careful mobilization of medical and hygienic resources will be required to keep them under control. Many of our doctors trained in industrial hygiene have gone from our state health service into the service of our country. Civilian health must be improved in the interest of defense needs. Population expansion in communities located near large military concentrations and in industrial communities with large defense

contracts creates health problems and the private practitioner, who remains at home, will be called upon to shoulder equal responsibility with his colleague in the war service, by doing an active service towards maintaining the health of those employed in the defense plants.

To those of us who are not in the active service in the Army or Navy will be entrusted the opportunity for leadership in civilian medical defense. Since the present world war is as much an attack against civilians as it is a struggle between armed forces, this is a most important work, and in some ways the task is even greater than that of his colleague in the front lines. Assuring adequate hospital facilities in time of disaster; protecting those facilities against air raids; recruiting volunteer doctors, nurses, first-aid workers, and other personnel; forming this personnel into emergency posts, squads, and teams; arranging for their training; equipping first-aid stations and mobile units; testing the efficiency of the organization by means of periodic drills; supervising it constantly; keeping abreast of new developments and new methods—these are but a few of the duties of the physician entrusted with the civilian medical defense.

Because of years of preparation, the medical profession is now able to assure the people of our country a continuity of medical education, medical service for the people, and medical care for the armed forces, such as never could have been supplied without such planning. War and disease go hand in hand. In the actual conduct of war itself more armies have been destroyed by disease than by human enemies. The progress of medical science in this generation has been one of the supreme events in human history.

In two decades, war has become more terrible, largely through its mechanization, but it is comforting to know that the contribution of science has not been one-sided—that wounds which in other wars meant agonizing death, or disabling mutilization for life, can now be treated effectively. Shock and infection largely have been overcome. This was strikingly illustrated by the United States Army Medical Corps at Pearl Harbor. Horrible as this tragedy was, it would have been much worse had it happened in World War I.

There has never been a time when the human race, the nations of the world, and our profession in particular, needed intelligent, careful, thoughtful, common-sense leadership as it does today. Therein lies a challenge to all of us, to bring forth the best and the most substantial traits which we possess and to apply them to our

future problems which are just being opened up by our present situations. It is unnecessary for me to call upon every member of the Arkansas Medical Society to do his duty, for each will find a place where he can best serve the cause, and then will perform that service to the best of his ability.

I do not minimize the seriousness of existing conditions, but during these times of stress, I believe that it is the duty of all Americans to maintain their cheerful dispositions. We must keep our spirits up and morale high. We must not permit "Hate" to dominate us in these trying days. Every one of us will do his part to hold high the honor and integrity of America. There is a day beyond the war, when reconstruction must take over and try to build again what destruction has wrought. In that day of leading a demoralized world back to normalcy, the Medical Profession will play a large part.

COMMUNIQUE

El Paso, Texas
May 14, 1942.

To the Editor:

A few days after you receive this, we will be on the ocean headed for the theater of operations. I was transferred here April 28th, one of many doctors sent here to activate a bunch of new station hospitals. We are to accompany anti-aircraft outfits, some of them air-borne.

Our outfit consists of seven officers and forty-two enlisted men. I am the whole department of internal medicine in this 50-bed hospital and temporarily the C. O.

Mitzi and Bob spent the past week here, but return tomorrow to 701 North Second Street, Atchinson, Kansas. Please send the Journal there and tell our friends about the address.

My new address will be: Capt. Charles H. Finney, O-280115, 100th Station Hospital, APO-1060, care Postmaster, New York, N. Y. The APO stands for army postoffice and both it and the serial number will be required to get mail to me. Tell the gang that letters will really be appreciated.

See by the May Journal that Wilson and Schirmer are in the army now. Hope they do not have to wait as long for overdue promotions as we did.

I also hope it isn't too long until I can shake hands with all the Old Guard, instead of just sending them my best regards.

As always,

Charley Finney.

TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

SUCCESS in the use of chemotherapeutic agents in combating infectious diseases revived the hope that eventually a substance will be found that will be useful clinically in the treatment of tuberculosis. Promin, one of the compounds used experimentally has already been discussed in the public press. Abstracts of the article announcing the results obtained in animals with this chemical follow:

PROMIN IN THE TREATMENT OF TUBERCULOSIS

In 1938, sulphanilamide was reported to have an inhibitory effect on the development of experimental tuberculosis in guinea pigs but subsequent papers held out scant hope that this agent would prove to be a specific remedy for tuberculosis in human beings.

Promin in its solid form varies from white to light yellow and is slightly hygroscopic. It is highly soluble in water and 40% solutions are stable indefinitely and may be sterilized by heat. It is slightly bitter but small amounts may be mixed with the food of animals without impairing their appetite or digestion. Guinea pigs tolerate one percent promin in their foods and will consume from 300 to 400 mg. of the drug per 24 hours. Increasing the concentration of promin to 2% causes anorexia which interferes with the quantity of food taken.

In the first experiment, promin to the amount of one percent was added to the feed of 30 guinea pigs while 20 others received the same diet but without promin. Two days after the feeding experiment began, all guinea pigs (50) were inoculated subcutaneously with human tubercle bacilli of known strain. On the 84th day all the animals in the control group had died and 24 of the animals which had received promin were living. Promin was then removed from the diet of 12 of the survivors. After 82 days more, 13 animals still lived, five of which had received promin for the entire period (166 days) and the other eight for the first period of 84 days only. The purpose of this procedure was to determine if latent tuberculosis would become reactivated when treatment was discontinued.

The value of a chemotherapeutic agent must be appraised not only on survival time, but also on the character of the disease process. With one exception the degree of tuberculous involvement in the animals that received promin was notably less than in the controls.

Although the results indicated that in many of the animals promin either had prevented the establishment of lesions or had caused their eventual disappearance, another effect of the drug which is perhaps of more importance was that which it exerted on the cellular elements of the lesions. In the vast majority of the animals in the treated group that had lesions, the histopathological characteristics of the disease process apparently were modified favorably. This was especially true of the lesions in the parenchymal tissues. The lesions were usually small and discrete and the epithelioid phase of the reactive process predominated. Necrosis was infrequent and a tendency of the process toward fibrosis was observed frequently. These features of the morbid process were in marked contrast to those that characterized the disease in the control group of animals. In the latter the disease was extensive, destructive and progressive.

The objectives of the second experiment were: (1) to confirm results of the first and (2) to determine what effect, if any, promin might have on a tuberculous infection introduced at the same time as or at varying periods before treatment with promin was begun.

Eighty guinea pigs were selected and divided into 8 groups. Group one consisted of 12 animals

infected but not treated (controls). Group 8 consisted of 20 animals whose treatment began two days prior to infection. Groups 2 to 7 each contained 8 animals and treatment was begun, in relation to the day of infection, at various intervals as follows:

- Group 2—day of infection
- Group 3—3 days after
- Group 4—one week after
- Group 5—2 weeks after
- Group 6—4 weeks after
- Group 7—6 weeks after

All animals (one exception) reacted to tuberculin. Generally speaking, the reactions of the animals that received promin were less severe than those of the untreated animals.

While the general physical condition of the animals remained satisfactory, changes indicative of toxic manifestations were noted in the blood and spleen. Studies, as yet incomplete, indicate that in guinea pigs, promin may induce a hemolytic type of anemia but with adequate regeneration as indicated by a corresponding reticulocytosis.

The difference in survival times of the several groups was striking. When the last of the untreated animals died, 189 days after inoculation, 84% of the treated animals were still living. Of the treated animals that died, none had sufficient tuberculosis to account for death, and this percentage of deaths might reasonably be con-

sidered an average or normal mortality rate for guinea pigs.

Examination of the tissues and organs of the animals showed that all untreated animals were tuberculous, that in 57% of the treated animals no evidence of infection in the visceral organs was found, that in the remainder of those treated tuberculosis was found (with a few exceptions) of minimal severity and that 43% of the treated animals failed to show evidence of disseminated tuberculosis.

The failure to demonstrate lesions of tuberculosis in a considerable number of the animals that were treated and the further fact that the disease in the treated animals was, with few exceptions, minimal and nonprogressive indicate that the action of the drug was significant. That fairly comparable results occurred in the treated animals, regardless of whether the administration of the drug was started before or as long as four or six weeks after inoculation with tubercle bacilli, was surprising and must indicate that the drug was effectively operative against a tuberculous infection in which morbid changes already were established when administration of the drug was started.

The conclusion of the two experiments is that promin had a deterrent effect on experimental tuberculous infection.

Promin in Experimental Tuberculosis, Wm. H. Feldman, M.D., H. Corwin Hinshaw, M.D., and Harold E. Moses, M.D., *Amer. Rev. of Tuber.*, March, 1942.

ENCOURAGED by these carefully controlled animal experiments, promin has been used guardedly in the treatment of a few cases of tuberculosis in human beings. Administration of the drug has proved difficult since its toxic effect in man is found to be much higher than in the guinea pig. In certain cases it has been found necessary to discontinue treatment because of unfavorable symptoms attributed to the drug itself. In other cases where treatment has been prolonged (5 months or more) results thus far show varying effects. In a few, definitely demonstrable improvement occurs; in others little or no change is observed; while in some patients, the disease goes on developing progressively with no apparent effect from the treatment.

It is obvious that a freshly infected guinea pig presents a very different pathological picture from that of a well developed human case with destruction of tissue and extensive fibrosis which interferes with access of the drug to living tubercle bacilli.

Despite the present lack of convincing evidence of promin's value in the treatment of human tuberculosis, there appears to be a definite feeling that further trial in skilled hands is indicated.



R. B. ROBINS, M. D.
Camden

President
Arkansas Medical Society
1942-1943

The President's Page

FELLOW DOCTORS:

In your selection of me as your president for the coming year you have furnished me with one of the greatest inspirations of my life. I feel so inadequate for the task but I hope that I shall serve you in such a way that you will have no reason to regret your action. The success of the coming year will depend upon your help, your advice, and your counsel. I have the faith that you will respond with full cooperation.

I wish to compliment my predecessor, Dr. H. Fay H. Jones, for a wonderful year of service to the Arkansas Medical Society. His administration has set a pattern which it will be difficult to follow.

The year ahead of us is faced with tremendous problems. First, we face a war year which is the major problem. We, as a profession, have a great responsibility and we are ready to face it. Decisions which are made will not only affect our lives, but the lives of those who will come after us. The hardest problem is the problem of the future. I am interested and I know that you are interested that the patterns of medical practice shall be determined by Doctors of Medicine rather than by Doctors of Philosophy, Doctors of Sociology and politicians.

The second great problem of the year is the coming session of the Arkansas legislature. Efforts will be made as they always are to lower the standards of medical practice in this state. This is also an election year, and there are candidates in the field now who will attempt to lower medical standards. Doctors do not as a rule like to take part in politics, but it is my belief that there should be more interest taken by doctors in politics. Study the candidates and use your vote and influence accordingly.

We are proud of our profession because of its high and noble objectives. In war and in peace the motives are always the same, preserving and saving human life. In war this is quite contrary to the objectives of other fields of science, which are devoted to finding means and methods of destruction of life. I am proud and you are proud to belong to a field of science, medicine, which has great humanitarian motives.

Gentlemen, let's work together in good fellowship to the end that the Arkansas Medical Society may have a successful year and to the end that the standards of medical practice in this state may be maintained on the high level which now exists.

Your servant,

R. B. ROBINS, M. D., President.

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EDITORIALS

OUR PRESIDENT

R. B. Robins, Sixty-seventh President of the Arkansas Medical Society, was born at Ozan, Arkansas, October 27, 1899, and attended the public schools of Hempstead county, graduating from the Washington High School in 1916. Prior to attending Hendrix College, Conway, from which he received his Bachelor of Science degree in 1921, he taught school and worked as a telegraph operator. He next entered upon his studies at the University of Chicago from which he received his Master of Science degree in 1923. His medical degree was obtained from Rush Medical College in 1925 and his internship was at the Norwegian-American College in Chicago. Since 1926 he has practiced at Camden where he heads the Robins Clinic. Civic activities have interested him with the enthusiasm he applies to all his interests. In the Lions Club he has been a Past-President of the Camden club, a Past Zone Chairman, a Past Deputy District Governor, is a Master Key member and at present is serving as District Governor, 7-B, Arkansas, and is being presented as a candidate for

International Representative this summer by the Arkansas clubs. He is affiliated with the Methodist church, the Masonic order, and is a Vice-President of the Executives Club of Little Rock. He is professor of medical economics at the University of Arkansas School of Medicine. His professional memberships include the Ouachita County Medical Society, which he has served for many years as secretary and one year as president, member and Past-President of the Tri-State Medical Society, Fellow of the American Medical Association, Associate member, American Therapeutic Society, Fellow of the American College of Surgeons and member of the Southern Medical Association. He has served the Arkansas Medical Society as delegate, six years as a member and chairman of the Committee on Scientific Work, member of the Council for two terms and its Chairman for two years. His experience in medical organizations, his unbounded desire to serve his colleagues well, his alertness to the advantages of medical organization, a cheerful optimism and pleasing personality, an eagerness to work, promise that 1942-1943, a year of difficulties, will see the Arkansas Medical Society surmount its problems and attain greater heights in the esteem of the public and of the profession.

THE HOT SPRINGS SESSION

With a total attendance of 378 members and visitors the 1942 annual session surpassed the hopes of all. War-time activities and rationing did not prevent enthusiastic response of the membership to the program and social features. The medical profession fully realizes that progress in medical science and art will continue despite the destruction of war and individual physicians will continue alert to provide their patients with the best possible medical care. R. B. Robins, Camden, assumed the office of President, and the following were elected: President-Elect, S. J. Allbright, Searcy; First Vice-President, L. G. Martin, Hot Springs National Park; Second Vice-President, R. C. Dickinson, Horatio; Third Vice-President, S. A. Drennen, Stuttgart; Treasurer, Paul L. Mahoney, Little Rock; Secretary, W. R. Brooksher, Fort Smith, and the following Councilors: Second District, L. T. Evans, Batesville; S. W. Douglas, Eudora; C. E. Kitchens, DeQueen; Jos. F. Shuffield, Little Rock, and Clyde McNeil, Rogers. E. E. Barlow, Dermott, was selected as Delegate to the American Medical Association for the sessions of 1942 and 1943 and H. Fay H. Jones, Little Rock, was elected Alternate. Little

Rock was chosen for the meeting of the Society in 1943. In the reorganization meeting of the Council, Clyde McNeil was elected Chairman. The Section of Eye, Ear, Nose and Throat elected the following officers: Chairman, Raymond Cook, Little Rock; Vice-Chairman, Virgil L. Payne, Pine Bluff, and Secretary, K. W. Cosgrove, Little Rock.

PHYSICIANS ARE URGED TO SEEK ARMY COMMISSIONS IMMEDIATELY

Physicians who have selected the Army as first choice in their enrolment with the Procurement and Assignment Service should not wait to be called on by state recruitment teams but should apply for immediate commissioning to the state representatives of the Procurement and Assignment Service. The Journal of the American Medical Association advises in an editorial in its May 16 issue. The Journal says:

"Under the heading of Medicine and the War in this issue of The Journal appears an official statement by General Hershey, director of the Selective Service System, relative to the recruitment of physicians for the United States Army Medical Corps. This statement, addressed to the state directors of the Selective Service System, discusses the new plan, already described in The Journal, whereby teams for the recruitment of physicians are established in the various states. Following a meeting in Omaha on May 8 the plan was extended also to all states west of the Mississippi River. In each state representatives of the Office of the Surgeon General of the Army, of the Adjutant General's Office and the state representative of the Procurement and Assignment Service for Physicians, Dentists and Veterinarians will function as a team for the recruitment of physicians. They have authority to issue commissions in the grades of lieutenant and captain, immediately following physical examination. This step has been necessary because of the shortage now prevailing of five thousand physicians for the U. S. Army Medical Corps. No doubt physicians in more than adequate numbers will respond.

"Never has there been any question of the patriotism of the medical profession! Any delay that has occurred up to now in enrolment has been associated with the desire of every physician to serve in the capacity for which he is best suited. The various technics that have been developed for making such determination have apparently resulted in some delay by physicians in making themselves available prior to receipt of

the enrolment form and questionnaire now in the hands of every physician. Already many thousands of these enrolment forms have been received in the office of the National Roster. The names of physicians who select Army as first choice will no doubt soon be supplied to the state recruitment teams; they may then call on such physicians for immediate action. However, physicians must not wait for such call; they are needed now. They may apply for immediate commissioning to the state representatives of the Procurement and Assignment Service.

"The circular issued by General Hershey calls particularly to the attention of the local boards of the Selective Service System the type of consideration to be given to claims by physicians for deferment because of dependency. Physicians who are commissioned as officers will, of course, have much more difficulty in sustaining a claim based on dependency than would those who are enlisted in ranks below that of lieutenant or captain.

"As experience has developed, it becomes more and more apparent that many of the difficult problems associated with the recruitment of physicians are being solved. By a decision now prevailing, physicians who are not citizens may enlist in the United States Army and after three months of service may be made citizens. If the situation concerns a physician from abroad who is licensed to practice in one of the states, he may become a citizen by enlisting in the United States Army and after a period of three months may become a citizen and apply for a commission.

"Today the situation is much more complicated than in the times of previous wars. A system of extended residencies and assistantships associated with qualification for the certificates of the boards in the various specialties now covers many young graduates in medicine. Especially needed at this time as a means of encouragement to such young men in offering their services to the armed forces is a definite action on the part of each one of the certifying boards indicating the extent to which it will accept military service as a part of the requirement for certification in a specialty of medical practice.

"A meeting of the Committee on Medical Preparedness of the American Medical Association was held in Chicago on May 9. The Committee on Medical Preparedness considered many of the problems which now confront the medical profession in relation to an adequate supply of medical officers for the armed forces.

The headquarters of the American Medical Association is giving its fullest cooperation to the Surgeon Generals and to the Office of Procurement and Assignment. The American medical profession has never failed in its response to the government of the United States when its members were needed in time of war."—J. A. M. A., May 16, 1942.

GOVERNMENT ISSUES DRASTIC QUININE RESTRICTIONS

Drastic restrictions on the use of quinine are embodied in Conservation Order M-131 of the Division of Industry Operations of the War Production Board, issued April 4, to take effect immediately.

The order does not apply to stocks not in excess of 50 ounces held in any one place. This means that retail druggists may dispose of present stocks which do not exceed 50 ounces without restriction.

On newly acquired supplies, however, the retailer will be required to certify that he will not sell such quinine except for anti-malarial purposes under any circumstances.

This bans the filling of physician's prescriptions for quinine acquired after April 1, subject to the certification referred to, written for the treatment of any condition other than malaria.

VIRTUAL STOP ORDER

Quinine already incorporated in preparations containing other medicinal agents is not made a subject of the order, but manufacture of such quinine containing preparations not designed for the treatment of malarial conditions is prohibited after April 4th.

This order, in effect, cuts off the supply of future quinine to retail drug stores in all areas where malaria does not occur. For this reason it may be good practice for retail druggists to conserve the stocks on hand by restricting the over-the-counter sale of quinine tablets, capsules and powder in order to preserve a supply for prescription practice for all purposes as long as the supply lasts.

NO RX'S EXCEPT FOR MALARIA

The question arises as to the duty of the pharmacist having only newly acquired quinine on hand which he has certified will be used only for the treatment of malaria, when he is presented with a physician's prescription or requests for refills calling for quinine with no notation as to the purpose for which it is prescribed.

In such a case, under this order as it now stands, it becomes the duty of the pharmacist to ask the physician the purpose of the prescription. If it is not for the treatment of a malarial condition, the prescription cannot be lawfully filled.

The same drastic penalties for violation of this order as for the collapsible tube order are provided. Thus, strict compliance on the part of the retail druggist is the only safe course.

COMING MEDICAL MEETINGS

Ninth Councilor District Medical Society, Harrison, June 3rd.

American Medical Association, Atlantic City, June 8th-12th, 1942.

PROCEEDINGS OF SOCIETIES

The First Councilor District Medical Society met at Tyronza May 7th for the following program: Address of Welcome, Hon. Jerry Downs; Response, Ira Ellis, Monette; "Treatment of Fractures of the Forearm," F. Walter Carruthers, Little Rock; "Clinical Syndromes of Coronary Artery Diseases," S. C. Fulmer, Little Rock; "Medicine and Medical Men from the Patient's Viewpoint," Rev. E. G. Kaetzall, Tyronza; "Problems and Progress in Medicine," W. H. Anderson, Booneville, Mississippi; "Pyelitis," H. King Wade, Hot Springs National Park, and "Problems of Arthritis," C. H. Lutterloh, Hot Springs National Park. Luncheon was served at noon.

J. H. McCurry, Cash, was re-elected secretary and Jonesboro chosen for the fall meeting.

The Arkansas State Pediatric Society met in annual session at Hot Springs National Park April 28th for the following program: "Use of Sulfonamides in the Treatment of Gonorrheal Conjunctivitis," Gilbert Levy, Memphis; "The Relationship Between the Pediatrician, the Otolaryngologist and the Allergist," Paul L. Mahoney and Alan Cazort; "The Diagnosis of Poliomyelitis," Gilbert Levy, and "The Orthopedic Treatment of Poliomyelitis," W. V. Newman, Little Rock. A round table luncheon followed the scientific session. Officers elected are: J. E. Jones, Little Rock, President, and Pauline Kearney, Little Rock, Secretary-Treasurer.

The Arkansas Chapter, American College of Surgeons, will meet at Mayfair Hotel, Searcy, Monday, June 15. The morning will be devoted to organization and a Scientific program will be presented during the afternoon.

The following Scientific Exhibits were presented by the University of Arkansas School of Medicine at the 67th annual session in Hot Springs National Park:

1. **Cataract and Other Ocular Changes Resulting from Tryptophane Deficiency**—John R. Trotter, Paul L. Day and K. W. Cosgrove—Departments of Biochemistry and Ophthalmology.
2. **Blood Bank**—Paul C. Eschweiller, Director.
3. **Student First Aid Unit**—Byron L. Robinson, Director.
4. **Administration**—Byron L. Robinson, Dean.
5. **Demonstration by Departments of Physiology and Pharmacology.**
 - a. **Stethograph (with amplifier) in Clinical Practice and Teaching.**
 - b. **Oxygen Therapy; Types and Equipment.** Supervised by Kenneth A. Siler.
6. **Chest Surgery**—J. K. Donaldson, Department of Surgery.

The Clay and Greene County Medical Societies met in joint session at Rector recently for the following program: "The Acute Abdomen," E. Holder, Memphis, and "The Diarrheas of Children," C. V. Croswell. Luncheon was served following the scientific program.

J. E. McGuire, Secretary,
Clay County Medical Society.

Robert Greenblatt, Professor of Medicine, University of Georgia, addressed a special meeting of the Sebastian County Medical Society at Fort Smith April 25th on "The Granula and Chancroid Diseases."

The Ouachita County Medical Society met in regular monthly session May 7th at the Ouachita Hotel in Camden. The speaker was Dr. Wm. Garnier, of Bastrop, Louisiana, whose subject was "The Orr Method of Treating Fractures and Osteomyelitis."

R. B. Robins, Secretary.

The Mississippi County Medical Society was addressed May 5th at Blytheville by William T. Black, Memphis, "Color Pictures of Diseases of the Female," and A. R. McConnel, Memphis, "Urology."

Gean S. Atkinson, Acting Secretary.

The Pulaski County Medical Society was addressed at its meeting May 18th by Maj. Daniel H. Autry, Camp Robinson, "The Medical Officers' Recruiting Board" and Samuel Phillips, Charles Wallis and Wilfred R. Parsons, "The Diagnosis and Treatment of Diarrheas of Children."

T. Duel Brown, Secretary.

The Lawrence County Medical Society was addressed at Cave City May 18th by J. J. Monfort, Batesville, "Reasons for Diagnostic Errors" and J. H. McCurry, Cash, "Art of Practicing Medicine."

Chas. D. Tibbels, Secretary.

The Fourth Councilor District Medical Society met in dinner session at McGehee May 19th for the following program: "Surgical Diseases of the Thyroid," John G. Snelling, Monroe, Louisiana; "Myxedema," William Hunter, Monroe, Louisiana, and "The Acute Abdomen," R. B. Robins, Camden. Officers elected are Marion Leverett, McGehee, President, and Secretary, W. A. Snodgrass, Jr. The Society will next meet at Pine Bluff in November.

PERSONALS AND NEWS ITEMS

Warren S. Riley, El Dorado, has been promoted to Major, Army Medical Corps. Major Riley is now serving overseas.

H. V. Kirby, Harrison, has been called to active duty as Lieutenant, Army Medical Corps, and assigned to Camp Shelby, Mississippi.

R. H. Johnston, Clarksville, now stationed in New Orleans, has been promoted to Major, Army Medical Corps.

A. C. Modelevsky, Jonesboro, recently addressed the Business and Professional Women's club at Walnut Ridge on "Contagious Diseases in Time of War."

Joe E. Beasley, Blytheville, has been called to active duty in the Naval Medical Corps as Lieutenant (jg), and has been assigned to the Washington Naval Base Hospital.

S. C. Fulmer and F. W. Harris, Little Rock, attended the sessions of the American College of Physicians in Saint Paul during April.

H. Lee Fuller, Little Rock, addressed the Ouachita County Tuberculosis Association at Camden April 7th on "History of Tuberculosis."

Robert Hood, Russellville, has opened a new office at 108 South El Paso Avenue.

A. C. Shipp, Little Rock, addressed a joint meeting of the Chamber of Commerce and the Business and Professional Women's club at Dumas April 14th on tuberculosis.

J. S. Miller, Parkin, was one of the lucky turkey hunters during April.

Joe Sanderlin recently addressed the graduating class of the Baptist State Hospital Nurses' Training School, Little Rock.

Guy Shrigley, Clarksville, has been appointed Lieutenant, Medical Corps, United States Army, and assigned to Hoff General Hospital, Santa Barbara, California.

W. M. Woods, Huntington, has been called to duty as Lieutenant, Army Medical Corps, and assigned to the air force at Alexandria, Louisiana.

Carl Rosenbaum, Little Rock, addressed the recent session of the Arkansas Dental Society on "Pathology of the Jaws."

A. C. Kolb, Little Rock, has been appointed Arkansas member of the Committee on Public Education of the American Psychiatric Association.

A. S. J. Clarke recently addressed the Monticello Rotary club on the work of the health department.

A. C. Modelevsky, Jonesboro, recently addressed the rural-urban meeting of the Jonesboro Kiwanis club at Bay on "Cancer Control."

M. V. Russell, El Dorado, attended a recent eye, ear, nose and throat meeting in Dallas.

Elizabeth Fletcher recently addressed the Little Rock Public Welfare Forum on "Mental Hygiene."

Capt. J. B. Elders has been transferred to the 827th Tank Destroyer Battalion, Camp Forrest, Tennessee.

Geo. F. Atkinson, Manila, has been called to active duty as 1st Lieutenant, Army Medical Corps, and assigned to the Presidio, San Francisco.

Driver Rowland, Hot Springs National Park, has received his M. Sc. (Med.) degree from the University of Pennsylvania.

R. J. Calcote, Naval Hospital, Corpus Christi, recently addressed the Corpus Christi Eye, Ear, Nose and Throat Society on "The Etiology and Prevention of Impaired Vision and Blindness in Children."

Guy B. Slaughter, Little Rock, has been ordered to active duty as Lieutenant, Army Medical Corps, and assigned to Letterman General Hospital, San Francisco.

Jim McKenzie, Hope, has been called to active duty as 1st Lieutenant, Army Medical Corps, and assigned to Bowman Field, Louisville, Kentucky.

T. K. Mahan, Blytheville, has been called to active duty as 1st Lieutenant, Army Medical Corps, and assigned to the Presidio, San Francisco.

R. L. Taylor has been elected a director of the Conway Chamber of Commerce.

A. C. Kolb, Little Rock, attended the sessions of the American Psychiatric Association in Boston during May.

M. W. Chastain, Bentonville, spent a recent vacation in Kansas City.

BORN—To Dr. and Mrs. Gerald Blankfort, Little Rock, a son, on April 25th.

Gean S. Atkinson has moved from Manila to Blytheville.

MARRIED—On February 23rd, 1942, Dr. Guy P. Slaughter and Dr. Pauline M. Kearney, Little Rock.

Guy Hodges has been elected surgeon of the Rogers post of the American Legion.

J. Harry Hayes, Little Rock, has been elected governor of district 7-B, Lions Clubs of Arkansas.

Max Baldrige, Conway, has been called to active duty as Lieutenant, Naval Medical Corps, and assigned to Paris Island, S. C.

O. B. Barger, Mountain Home, has been called to active duty as Lieutenant, Army Medical Corps, and assigned at Fort Bliss, Texas.

E. J. Byrd has moved from Bearden to Camden.

B. V. Raley, Little Rock, has been called to duty as Lieutenant, Naval Medical Corps, and assigned to Naval Hospital, Pensacola.

S. R. Livingston has moved from DeQueen to Santa Rita, N. M.

Capt. Charles H. Finney, Fort Smith, has been assigned to a station hospital for overseas duty.

A. C. Modelevsky, Jonesboro, recently addressed a meeting of District No. 1, Arkansas State Nurses' Association on "Communicable Diseases in War Time."

J. D. Riley, State Sanatorium, gave the fifth annual Frank Vinsonhaler lecture at the southern province assembly of the Phi Beta Pi fraternity in Little Rock April 24th.

H. H. McAdams addressed the graduating class of St. Bernard's Hospital in Jonesboro May 6th.

The Arkansas Tuberculosis Association has re-elected A. C. Shipp, Little Rock, president. Others elected are: J. D. Riley, State Sanatorium, vice-president; Jerome S. Levy, Little Rock, secretary; Howard Dishongh, Little Rock, executive committeeman, and R. M. Eubanks and H. A. Higgins, Little Rock, directors.

A. G. Sullivan, Hot Springs National Park, has been called to active duty as Lieutenant-Commander, Naval Medical Corps, and assigned to Naval Hospital, Pensacola.

Chas. T. Chamberlain, Fort Smith, recently visited in Natchez and Vicksburg.

Euclid M. Smith, Hot Springs National Park, has been called to active duty at Ellington Field, Texas, as Major, Army Medical Corps.

Ulys Jackson, Harrison, has been transferred to Blytheville as health director for Mississippi county.

G. F. Hollingsworth has moved from Wildcat Mountain Sanatorium, Fort Smith, to Hampton.

D. V. Smith has moved from Huttig to Crossett.

OBITUARY

JAMES WILLIAM JOHN, age 74 years, died at his home in Pine Bluff May 2nd. Born in Cleveland County, he graduated from Memphis Hospital Medical College in 1896. An honorary member of the Jefferson County Medical Society and of the Arkansas Medical Society and a Fellow of the American Medical Association, he was also a member of the Board of Stewards of the Lakeside Methodist church. Surviving relatives are his wife, a son, four daughters and two brothers, Dr. J. F. John, Eureka Springs, and Dr. M. C. John, Stuttgart.

ORLANDO CONRAD HANKINSON, age 75 years, died at his home in Pine Bluff April 14th after an illness of several months. Born in Zanesville, Ohio, May 25, 1866, he graduated from the Vanderbilt University School of Medicine in 1892. He was an honorary member of the Jefferson County Medical Society and of the Arkansas Medical Society, a past-president of the Jefferson County Medical Society, a member of the First Baptist church, a member of the Knights Templar and of the Shrine. Surviving relatives are his wife and three sisters.

ERNEST HARL WHITE, age 54 years, died of heart disease at his home in Little Rock April 11th. Born in Owensboro, Kentucky, he was educated in the schools of that state and later moved to Little Rock. He taught school in North Little Rock and later became school principal. Here he met his wife. Later he attended the University of Arkansas School of Medicine for two years and graduated from Harvard Medical

School in 1922. He had been in active practice in Little Rock since graduation, was professor of obstetrics at the University of Arkansas School of Medicine, a past-president and past-secretary of the Pulaski County Medical Society, a Fellow of the American Medical Association, a Diplomate of the American Board of Obstetrics and Gynecology, a charter member of the Arkansas Society of Obstetrics and Gynecology, a member of Masonic bodies and of the Shrine and a member of the Second Presbyterian church. Surviving relatives are his wife, a daughter and a son.

ORLIE PARKER, age 60 years, of Wabash died in a Helena hospital May 11th of cerebral hemorrhage. He had lived in Wabash eight years, having moved there from Searcy. He graduated from the Memphis Hospital Medical College in 1912. Surviving relatives are his wife, two daughters and a son.

FRANK A. GRAY, age 64, died at his home in Batesville May 18th. Born near Hickory Valley in 1877, he graduated from Memphis Hospital Medical College in 1905, moving to Batesville in 1910 where he established a hospital. In 1929, he opened a 20-room hospital and on April 1, 1939, a modern and completely-equipped hospital was opened. In addition to his membership in the Independence County Medical Society and the Arkansas Medical Society, he was a member of the Masonic lodge and of the Batesville Kiwanis club. Surviving relatives are his wife, a daughter and two sons, Dr. Paul Gray, Batesville, and Dr. Laman A. Gray, Louisville, Kentucky.

PROCEEDINGS SIXTY-SEVENTH ANNUAL SESSION ARKANSAS MEDICAL SOCIETY

ARLINGTON HOTEL, HOT SPRINGS NATIONAL PARK

April 27th, 28th, 29th, 1942

FIRST SESSION, HOUSE OF DELEGATES APRIL 27, 1942

The meeting was called to order by President H. Fay H. Jones at 9:30 A. M.

The Credentials Committee (C. E. Dungan, R. C. Dickinson, G. W. Reagan and B. L. Ware) reported that the credentials of the delegates present had been examined, found correct, and that a quorum was present.

The following delegates and members seated as delegates by action of the House of Delegates answered roll call:

ARKANSAS—R. H. Whitehead; BENTON—Geo. M. Love; BOONE—J. G. Gladden; BRADLEY—W. J. Hunt; CARROLL—D. K. McCurry; CHICOT—E. E. Barlow; CLAY—J. E. McGuire; COLUMBIA—W. P. Cooksey; CRAIGHEAD-POINSETT—J. M. McCurry, W. W. Verser; CROSS—A. F. Barr; DESHA—H. T. Smith; GARLAND—Foster Jarrell, J. M. Proctor, Driver Rowland; INDEPENDENCE—C. A. Churchill; JEFFERSON—Fred Hames; JOHNSON—G. R. Siegel; LAWRENCE—J. C. Land; LINCOLN—L. T. Taylor; LITTLE RIVER—B. C. Routen; LONOKE—A. C. Watson; MONTGOMERY—G. E. Watkins; OUACHITA—S. A. Thompson; PHILLIPS—A. W. Cox; POPE-YELL—Roy I. Millard, Robt. Hood; PULASKI—Hoyt R. Allen, T. Duel Brown, Fred W. Harris, Glenn Johnson, Grady W. Reagan, Jos. F. Shuffield; SEARCY—E. A. Bing; SEBASTIAN—S. J. Wolfermann, B. L. Ware; SEVIER—R. C. Dickinson; ST. FRANCIS—J. O. Rush; UNION—A. D. Cathey; WASHINGTON—J. F. Lewis; WHITE—S. J. Allbright, and WOODRUFF—C. E. Dungan.

Other members of the House of Delegates present were President Jones; Councilors L. T. Evans, J. O. Rush, S. W. Douglas, B. L. Moore, H. E. Murry, Euclid M. Smith, J. F. John and Clyde L. McNeil; Past-Presidents E. E. Barlow, A. S. Buchanan, E. F. Ellis, Geo. B. Fletcher, O. J. T. Johnston, M. E. McCaskill, M. L. Norwood, H. T. Smith, S. J. Wolfermann and W. T. Wootton and Secretary Brooksher.

By motion (Barlow-T. Duel Brown) the minutes of the Sixty-sixth annual session as published in the June, 1941, issue of The Journal of the Arkansas Medical Society were adopted as correct.

President Jones appointed the following Reference Committee: S. J. Allbright, Chairman, Roy I. Millard and C. A. Archer.

A telegram was read from Past-president Kosminsky regretting his inability to attend the session.

First Vice-president H. King Wade took the chair.

President Jones read the President's Address to the House of Delegates.

ADDRESS TO THE HOUSE OF DELEGATES

H. FAY H. JONES, President

I deeply appreciate the honor of serving as president of the Arkansas Medical Society the past twelve months. I hope that I have justified the confidence that you placed in me. I wish that I might take time to tell you of the splendid work that is being done in the county societies, of the good attendance, the fine fellowship, and the excellent programs, as I have visited you in every section of our state.

Although this has been a busy year, due to the loyal cooperation of our efficient secretary, the hearty support of the Council, the fine spirit represented in various activities of the official committees, and the whole-hearted response of the membership, my duties have not been difficult. My deepest gratitude goes to each of you, who, through your counsel, aid, and kindly suggestions, have made my work pleasant.

As you know, I chose for our watchword this year, "COOPERATION," and I really believe that we have had constructive cooperation, rather than discord, throughout the year. I think that all of us realize that cooperation NOW is absolutely necessary if we are to maintain our standards of accomplishment.

We, who have had a part in the accomplishments of the Arkansas Medical Society, can look backward with pride and forward with confidence. If we take an honest pride in the past we have every right to have faith and courage in the future. On the threshold of another milestone it is our proud heritage that the achievements of our state medical society are still on the credit side of the ledger. At this time it is, I believe, fitting for us to recount some of the achievements of the past year and to think of future objectives for the best accomplishment of organized medicine in Arkansas.

Throughout the year there have been certain things your president has stressed in every sectional meeting, believing them to be necessary to our advancement and to the solution of the problems confronting us. May I recall some of them here: I have urged that each member attend every meeting of his county and district society; that each county society have a special committee to interview all doctors in arrears in order to restore them to good standing and retain them in membership; that each member be active on his committee, realizing that if his committee fails to function, it is as much his fault as the chairman's; that every member give the president of his society whole-hearted cooperation; that each county society and each councilor district plan inter-society and inter-district meetings to bring about more and better fellowship; that we subordinate our individual differences and organize as one against Government control and regimentation of the medical profession.

I have repeatedly stressed the fact that each physician in our state should affiliate with the work of the National Physician's Committee in its work of securing and providing the answers that the shifting economic and political activity require. Mr. Pratt, executive secretary of the National Physician's Committee, is one of our guest speakers for this meeting. He will outline to us the activities, accomplishments, and plans of the organization. It is my earnest wish that every doctor in Arkansas support this cause both by active cooperation and by financial aid.

It requires time, energy, and often sacrifice, to look after the interests of our own group, but every honest doctor should give a certain percentage of his time and money to the common good. If, and when, private practice is replaced by state medicine, we shall owe our plight largely to our own failure to do some of the things I have mentioned, and to our indifference.

I have urged that each society perfect its organization for Civilian Defense. For the duration of the war, every doctor is going to be used in some capacity. Those of us who are not in active service with the armed forces will be held responsible for civilian defense designed to prevent or alleviate the medical and public health hazards to which the civilian population may be exposed. The possibility of unheralded bombing of civilian populations, as well as likely hazards from sabotage, make imperative the preparation of facilities for providing medical service to casualties that may result from such incidents.

Recently I sent a letter to each county chair-

man of Emergency Medical Service in our state, requesting that all our county organizations be perfected, or near perfected, by this meeting date. It has pleased me greatly to learn that in most of the counties the work is going forward nicely. However, some of the counties have been derelict in their organization. I urge those to take time immediately to get the work launched and functioning. This is a most important service, for, if, and when, need of its function arises, it will be entirely without warning. The medical profession of Arkansas cannot afford to be taken unawares. We have been designated as in the third district most likely to be bombed in case of enemy invasion of the United States, and, because of the extensive war industries in our state, sabotage at any time is very likely to occur.

Arkansas has always forged forward in the up-building of the medical profession. In my travels over the state the past year, I have been impressed, in no uncertain way, with the supreme fact that no part of Arkansas has a monopoly of good doctors, and that our Arkansas doctors rate as high in their professional standards as those of any state in the Union—or anywhere, for that matter.

No one thing has developed the Arkansas Medical Society more than the Post-Graduate Medical Courses presented twice each year. These courses offer the type of intensive post-graduate study the medical profession needs and desires, presenting many new and outstanding features which are of interest to the general practitioners as well as to the specialists. It is my opinion that this is one of the activities of the society which should by all means be continued, and I urge each member of the society to set aside two days from his routine to attend these courses whenever they are held.

In this connection I wish to thank you for your loyal cooperation and support of your medical school. We look today to the rising generation of doctors to provide the leadership and constructive thought which may be instrumental in overcoming many of the besetting problems of medicine of the present day and those which may, and no doubt will, open up in the future. I bespeak your continued support of the medical school, directed to the means of insuring that the future doctor of Arkansas may not only receive the rudiments of his professional training during the four years spent in your medical school, but that he be inspired to continue his education throughout life.

As you know, by far the greatest percentage of students in attendance at the medical school are Arkansas boys. We can proudly say that graduates from our school are in demand in the largest and best hospitals in the country, because their training is A-1. The sudden war-time demand for physicians has made it compulsory for the medical school graduates, who successfully pass physical examinations, to enter the service of the armed forces. The medical profession has, however, been successful in obtaining deferment of pre-medical and medical students under the draft. At this time the war is presenting the problem of maintaining a complete faculty at the school, and as more and more of the faculty members, who are subject to the draft or are in the reserve forces, are called to the colors, and as others volunteer for service in the armed forces, we are going to have to look to the older doctors, many of whom have retired from teaching duties, to take over some of the classes. The War Department has made it very clear that there is no so-called "Essential List," all doctors except on account of age or disability, being subject to call into the service of the Army or the Navy.

While all of us are justly proud of our medical school we know that in some ways it is handicapped. I feel that there are certain specific lines along which we should lend our aid now. First: The University Hospital is greatly in need of more hospital and bed space. The waiting list of patients who need their suffering alleviated is too long, patients sometimes having to wait weeks before bed space is available to them. Second: It is impossible to provide the desired nursing facilities to the volume of patients now entering the hospital from every section of our state.

It is my recommendation that a hundred beds be added to the hospital to take care of this overflow of patients. The doctors available for medical service could hardly take care of a larger number of additional patients and this number of additional beds would be sufficient to take the medical school off the probation list and place it on the permanent list of Grade "A" schools.

It is also my recommendation that a nurses' training school be established in connection with the hospital. This would not only provide efficient nursing facilities, but I believe that a better type of service would be obtained. On account of the lack of funds, we are now unable to supply a sufficient number of graduate nurses to secure the efficient service we desire.

I feel that I should mention the Group Hospitalization Insurance as endorsed three years ago by the Pulaski County Medical Society. Since that time a number of medical societies and hospitals in our state have adopted this plan. Naturally, when the plan was first drawn up, it was more or less in the form of an experiment. It is a good beginning, but we have found that it is in need of some revision. I have talked to a great number of patients, who now have the plan in force and, without an exception, they have expressed themselves as favoring a slightly higher premium which would entitle them to complete hospitalization for a specified time with laboratory, X-ray, and other hospital fees included.

This Sickness Insurance Project is the spot where the National Health Act is most likely to strike first, and unless we are willing for the Government to work out a plan providing total benefits, including the naming of the medical fees, and perhaps the services of a Government doctor, we must beat them to the draw and direct the establishment of more and better hospitalization insurance coverage. I refer you to the editorial in the last issue (April, 1942) of the Journal of the Arkansas Medical Society, which was a reprint from the Journal of the American Medical Association, entitled: "Disability Insurance and Hospitalization Payments." This will certainly give you a clear idea of what is coming—and coming very soon, unless we can offer benefits which would off-set such legislation.

I recommend to this House of Delegates that the incoming president appoint a committee to study and formulate a plan of hospitalization insurance to be adopted by the state medical society and put into effect throughout the entire state—this plan to provide extensive hospital coverage for a specified time. It is suggested that the report and recommendations of this committee be submitted to the Council and that a way be worked out so, if acceptable, it could be adopted and set to functioning without waiting for action to be taken at the annual state meeting a year from now. It is my belief that if full insurance coverage could be worked out as a state group, it would be the solution to much dissatisfaction that is now present, as well as to the unjust criticism of the high cost of medical care.

I commend the work of the Woman's Auxiliary to our medical society. Not only is the Auxiliary fulfilling its social activities by bringing about better unity and friendliness among our

families, assisting with the entertainment at the medical meetings throughout the state, and thus increasing the attendance of doctors at these meetings; but the Auxiliary is also to be commended for its work in health education and public relations. A point not to be overlooked is the fact that the ladies of the Auxiliary, through their various organizations, are bringing convincingly to the ear of the public information touching the problems of organized medicine, and one might well add the services of organized medicine.

I have a recommendation to make in this connection. Although the society makes a donation each year to the Auxiliary for its Year Book, this has never been a specified sum and always requires the action of the Council. I do not believe that it is quite fair to have the Auxiliary go through the year not knowing whether or not the donation will be made, and if so, what the amount will be. It is my recommendation that a resolution be passed making a specified sum of money available to the Auxiliary each year for the publication of their Year Book.

Last, but by no means least, we consider the problem of medical legislation. As you know, this has not been a legislative year, yet, due to the alertness of Dr. Shuffield and his committee on medical legislation, to the excellent work of Dr. Brooksher in keeping us posted on matters of national health legislation, and to our united efforts, some substantial gains have been accomplished. We have succeeded in finally ridding Arkansas of several charlatans—particularly, Brinkley and Baker. Also we have barraged our congressmen with requests for their active opposition to many bills, which would weaken the position of our profession, and which have been presented in Congress and in Congressional committees. Many of these bills have been killed in the committee room.

There is one thing in which we are falling short. We are not seeing that some of the laws, which the legislative committee worked so diligently to get enacted, are being observed. Especially is this true with reference to Act Number 63, which is the Basic Science Law and the law regulating advertising by those who practice the healing arts.

I have it from authoritative sources that we are admitting persons to the practice of medicine in Arkansas who cannot show a basic science certificate. I feel that reciprocity can be carried too far and react against us. We have found that in issuing certificates by reciprocity,

admitting doctors to practice medicine in our state who have never taken a basic science examination, we have opened the way for the osteopaths to follow suit, which they are doing. This gradual sifting in will weaken our profession. Now that we have the basic science law we should see that it is not violated, as it was following the passage of the old law in 1929.

I understand that, if the Arkansas Medical Society desires it, there is a possibility that a composite board of medical examiners composed of 4 doctors of medicine, 2 eclectics, osteopath and 1 chiropractor, might be accomplished at this time. I suggest that the Council study the plan of a composite board as it works in other states where it has been adopted, and make recommendations as to its advisability in our state.

In the passage of House Bill Number 587, which is the Annual Registration Bill, it was the idea that the funds from this registration would be used in the prosecution of any violations to our medical laws. I should like to recommend that, as soon as the funds will permit, a full time secretary, preferably a man with some knowledge of law, be employed by the medical examining board. Such a secretary could hunt out and develop cases of law violation and see that they are prosecuted. The facts should in turn be passed on to our attorney, who would work up the testimony and turn it over to the prosecuting attorney for the indictment.

While the past year has not, as I have said, been a legislative year, this next one will be, and we must be on the alert to legislation that will probably be attempted. The osteopaths and chiropractors are expected to direct their effort to the passing of such legislation as will enable them to practice medicine and surgery. The direction of the present trend is indicated by the growing body of chiropractors who title themselves "drugless physicians." If we are not alert, as time goes on, they will adopt more and more of medicine's outward forms without the scientific care that gives them value.

Even though it may be distasteful to us, we are going to have to go into politics to protect ourselves. Let us keep in close contact with our senators and representatives, both national and state, and see that only those are elected who are worthy to represent us. This is a year when many senators and representatives will come up for election, and we should be especially alert throughout the year. We should insist on knowing their views regarding the medical profession.

At the present time in one county of our state a chiropractor is seeking the office of state senator.

As we look back over the history of our organization, its growth and progress are not attributable to any individual, but to a common interest in our problems and a practical application and a cooperation by all in their solution. With the fine cooperation represented by the membership as a whole, I feel that the work of our society, during the past year, shows a definite advancement, and for this splendid spirit, I thank you.

President Jones returned to the chair and the committees of the society reported in order, each report being referred to the Reference Committee.

COMMITTEE ON SCIENTIFIC WORK

H. KING WADE, Chairman

The program which will be presented during the next three days is probably the third program which has been arranged for this session, military service and varied difficulties causing cancellation of many of the speakers who had planned to address you. Your committee has worked hard to provide a profitable and interesting program. We invite you to hear the speakers who will bring you discussions of interest and value.

F. W. Ewing, Muskogee, Past-president, Oklahoma State Medical Association, was introduced by Past-President S. J. Wolfermann and expressed his pleasure at the opportunity of again meeting with his Arkansas colleagues. He extended greetings and best wishes from the Oklahoma State Medical Association.

COMMITTEE ON MEDICAL LEGISLATION

JOS. F. SHUFFIELD, Chairman

This year has been a very quiet one for the Legislative Committee as there has been no session of the legislature. We have cooperated with the state officers, the Council and the national organizations concerning legislation in Congress. Many bills in Congress have had medical aspects but no legislation which is unfavorable to organized medicine has passed.

Our attention has been called to the possibility of a composite medical examining board being needed in our state. We had best study the problem extensively before we make up our mind to try to pass such legislation. However, it might be found to be a solution to our trouble with the various examining boards and legislation concerning them.

This Committee calls to the attention of the House of Delegates the possibility of the osteopaths and chiropractors trying to pass a bill in the next legislature to permit them to do surgery. They had such a bill prepared for introduction last year but this Committee, in a conference with their committee, influenced them not to introduce the bill. Next year many of our physicians will be

in the army and navy which will decrease our strength and give them an incentive to introduce the bill. They will say there is a scarcity of medical men and they can supply the need to many who cannot get medical care. This will be a good sales point and the legislature will take this much easier than in normal times.

This Committee has no legislation to recommend. We express our appreciation to the various officers of the state society, to the House of Delegates, the Council, individual members of the profession and Attorney Peter Deisch, for their many acts of kindness, their cooperation and assistance.

COMMITTEE ON HEALTH AND PUBLIC INSTRUCTION

W. B. GRAYSON, Chairman

The Committee on Health and Public Instruction desires to report that general health conditions in Arkansas have been very satisfactory during the past year.

Reporting of communicable diseases by the physicians of Arkansas is consistently improving and is a valuable index as to the trends of diseased conditions. This seems to be one of the cycle years for measles, since the total number of cases reported to the State Board of Health was 6,348.

Diseases of the heart, nephritis, cancer, pneumonia, and tuberculosis continue as the principal causes of death, and it seems that we have too many deaths from such diseases as typhoid, diphtheria, and smallpox, for which we have known preventives.

Added responsibility has been given the State Health Department in the syphilis control program, in that the State Hygienic Laboratory does the serology of all selectees. It is interesting to note that of the first million men examined under the Selective Service Act, approximately 1.9 per cent of the white selectees showed positive blood and about 26 per cent of the colored selectees showed positive blood. We understand that this ratio for Arkansas holds true for the nation as a whole. The age groups under consideration here are the relatively young men, and of course the older individuals will show a much higher instance than the younger men. Army officials are interested in the attempt to keep venereal diseases at a minimum in Arkansas, especially around the army camps. A great amount of work is being done in this program, having begun last summer during the maneuvers of the 125,000 soldiers in South Arkansas.

Heavy responsibility in the protection of the civilian health in and around defense industries has added burdens to the State Health Department; and the problem of environmental sanitation, plus malaria control in these areas, demands constant attention.

The public health program is operating in all fields pertaining to the public's health, including milk control work, nutrition, and control of communicable diseases, although the loss of trained personnel to the armed forces works a hardship on the department in carrying out these functions.

The whole department works in close cooperation in the Emergency Medical Defense Program, and careful thought should be given the problems which might arise as the result of enemy attack or sabotage. Evacuation, with the housing and feeding of mothers and children, along with the aged and chronically ill, should be given attention by every local community, especially those having defense industries.

COMMITTEE ON MEDICAL EDUCATION
AND HOSPITALS

M. J. KILBURY, Chairman

In considering the status of the hospitals in the state I wish to divide them into 4 branches: hospitals maintained by the United States Government; those maintained by the state Government; those maintained by the railroads, and the private hospitals. The United States hospitals are as follows:

	Beds	Bassinets
Veterans' Administration, (A.C.S.)	1360	
North Little Rock, Arkansas		
Veterans' Administration, (A.C.S.)	258	
Fayetteville, Arkansas		
Public Health Medical Center	90	4
Hot Springs, Arkansas		
Army & Navy General Hospital, (A.C.S.)	518	
Hot Springs, Arkansas		
TOTAL	2226	

Three of these hospitals are approved by the American College of Surgeons as conforming to the minimum standards.

The state hospitals are as follows:

	Beds	Bassinets
State Hospital for Insane	4227	
Little Rock, Arkansas		
McRae Memorial Sanatorium	39	
Alexandria, Arkansas		
University Hospital, (A.C.S. & A.M.A.)	217	
Little Rock, Arkansas		
Arkansas Tuberculosis Sanatorium	1155	
TOTAL	5638	

The state institutions all report lack of facilities in housing, staffing and financing.

The railroad hospitals are as follows:

	Beds	Bassinets
Missouri Pacific Hospital, (A.C.S.)	125	
Little Rock, Arkansas		
St. Louis Southwestern, (A.C.S.)	150	
Texarkana, Arkansas		
TOTAL	275	

Private Hospitals—Total of 82—2875 beds.

Analysis of Private Hospitals	Number	Bed	Percentage
Total number of hospitals	82	2875	
Number built for hospitals	50	2267	78.7%
Number not built for hospitals	30	608	
Number with Clinical Laboratories	64	2688	
Number without Clinical Laboratories	18	187	
Number with X-ray Laboratories	71	2593	
Number without X-ray Laboratories	11	95	
Number having facilities for routine tissue examinations	21	1795	
Number with organized staff	20		
Number without organized staff	62		
Number with Nurses' organizations	41		
Number with Satisfactory Record System	56		
Number approved by A. C. S. with minimum standards	17	1922	69.3%

I think it is quite refreshing that the hospitals are showing an increased number of hospital days and a much better financial condition. It is also interesting to note that the major portion of the general or acute hospital work is being done by the private hospitals.

Questionnaires were sent out to all private hospitals. Response was obtained from 26 (2,232 bed capacity). These hospital report 75% of their bed capacity filled during the year of 1941. They report an increase of 34,446 hospital days over 1940.

According to the reports there was a definite increase in financial returns during the year. These hospitals were all reported to be in good financial condition. Such a report could not have been obtained ten years ago.

The majority of the hospitals report that Act 115 is functioning to their advantage. Some, however, report that the amount paid per patient does not meet the cost

of hospitalization. During the year ending July, 1941, the State Department of Public Welfare by Act 115 had paid to the hospitals of the state \$99,795 for hospitalization of 3,050 cases; 37% male, 63% female; white 85%, colored 15%.

The Crippled Children's Division of the Public Welfare paid to the hospitals \$64,405.52. There were 1,594 admissions and 596 new patients.

The Arkansas Children's Hospital serves children to 14 years of age. It is for those unable to pay for hospitalization. During 1941 children were treated from each county in Arkansas, a total of 1,020 in-patients. In the same year 458 out-patients were treated. The permanent staff consists of 15 nurses, a superintendent, a laboratory technician and an assistant. The medical staff consists of 31 physicians.

The Committee seems to think that the number of hospitals having an organized staff is too low and that an effort should be made by more of the hospitals to organize staffs. This would lead to a better hospital work, and it is also a great educational advantage to doctors to attend monthly staff meetings, even if this meeting should consist of only three or four doctors. The general spirit of the superintendent of the hospitals manifested in the reports is that of gradual improvement.

COMMUNITY GROUP HOSPITALIZATION PLAN: The Community Group Hospitalization plan was inaugurated in Arkansas in March, 1940. In the beginning the plan was conceived and worked out in its minutest detail by the Medical Economics Committee, working in conjunction with the very Rev. Msgr., John J. Healy, of St. Vincent's Infirmary, Mr. Lee C. Gammill of Baptist State Hospital and representatives of the underwriter. Because of the thoroughness with which the plan was developed, the past two years have seen, on the whole, a satisfactory expansion of the plan.

It will be recalled that the underwriters of the plan accepted the responsibility and assumed the hazard involved only with the unanimous support of the medical societies. The policies of the plan have been under the direction of Advisory Boards composed of representatives of the medical societies, member hospitals and underwriter, with the largest representation being held by the societies.

The plan has been extended from time to time within the past two years to 19 or 20 counties. Circumstances compelled the withdrawal from 5 of those counties. In the counties in which the plan has succeeded, and they are in the large majority, the success of the plan has been due to the obvious support of the individual members of the societies, the careful cooperation of the doctors in underwriting the applications for membership in the plan, and the conscientious adherence to the fundamental principles of group hospitalization by the doctors in seeing to it that:

1. Their patients who are members of the plan are hospitalized only when hospitalization would be resorted to, were the patients not members of the plan, and;
2. Their patients leave the hospital just as soon as is consistent with good medical practice.

In 1941 and thus far in 1942, organization activities have been conservative in order that the plan might catch up, so to speak, with the expenditures made in excess of income during the first several months of the plan's existence. Even with the more conservative organization expenditures, the membership has increased satis-

factorily. In all there are over 500 employee groups covered by the plan, as well as hundreds of individuals for whom group membership is impracticable or impossible. The average cost per person hospitalized in Pulaski county has been \$28.59 for males and \$36 for females. The fact has been quite well established from the plan's experience that the incidence of hospitalization among females is well over two times the incidence among males. It will be recalled that while the cost of dues for the female dependent is one-third less than the cost of the member, the benefits to the female dependent are only one-fourth less.

Since more than one-half of the people covered by the plan are female risks, this constitutes a matter for the very closest cooperation of the doctors. It goes without saying that the underwriter of the plan recognizes that only with the very fullest cooperation of the doctors and hospitals can any plan for hospitalization succeed. The extent to which the plan has served the hospitalization needs in the various communities in which it serves may be seen from the following facts:

In the first 25 months of the plan's activities—2,334 people have been hospitalized:

With a total cost to the plan in payments to hospitals of.....	\$75,941.17
Of this amount has been expended	
On male members.....	17,942.98
On female members.....	31,662.34
On male dependents.....	5,489.20
On female dependents.....	20,978.65

The 2,334 patients have an average hospital stay of 7.16 days each—or a total of 16,718 hospital days. While the underwriter has not yet recovered the initial expense incurred in the organization activities of the plan, with a continued experience of the past few months and the continued cooperation of the members of the medical societies, the trend is much more favorable. The underwriter remains cognizant of the fact that everything they do should reflect favorably upon the medical societies who established the plan and who have sponsored it so loyally since.

EDUCATION: As a result of increased activity in the medical profession, post-graduate education has not received much attention during the past year. However, the post-graduate committee of the Arkansas Medical Society held one two-day meeting in October. This was exceptionally well attended considering the conditions of the time and a very successful meeting was held. In September, 1941, a two-day meeting of the Tri-State Medical Society, Arkansas, Louisiana and Texas, was held at El Dorado. This was well attended, and there were several out of state speakers present.

The Fort Smith Clinical Society held their one day meeting as usual. It was well attended.

The Medical School reports as follows:

Enrollment for the year 1940-1941—295.	
Freshman	82
Sophomores	69
Juniors	66
Seniors	70
Technicians	8
TOTAL.....	295

70 seniors were graduated on June 10, 1941. 69 seniors accepted internships—the one exception was Mrs. Ruth Junkin who had a child. She is working with her father-in-law at Granite Mountain Hospital.

Number holding commissions on graduation—32 (24—Army; 8—Navy). Applications for freshman class, 1940..... 211 Number accepted for freshman class, 1940 82 Average hospital bed occupancy (for year 1941)..... 152.7 New patients in Isaac Folsom Clinic in 1941 9,324 Total patient visits to Isaac Folsom Clinic in 1941 71,198 Number of interns and residents, July, 1940, July, 1941 (12 interns; 11 assistant residents and residents)..... 23

Applications for Admission to Freshman Class				
	1939-40	1940-41	1941-42	1942-43 (4-23-42)
Resident applications	77	91	81	122
Resident accepted	66	72	72	
Non-resident applications	108	120	141	248
Non-residents accepted	16	10	10	
The Committee:				
Dr. M. J. Kilbury, Little Rock, Chairman,				
Dr. S. J. Allbright, Searcy,				
Dr. J. W. Amis, Fort Smith,				
Dr. O. W. Clark, Pine Bluff.				

COMMITTEE ON PUBLIC RELATIONS

W. T. WOOTTON, Chairman

We, your Committee on Public Relations, beg to report that communication with the public has been continued throughout the year by means of newspaper articles which regularly appear in 100 state papers. The response to these articles leads us to believe they are read by the public and are generally helpful. We recommend that you see fit to authorize their continuance. Your committee is unhappy to report that little or nothing has been done so far to get the propaganda for lowering the mortality in appendicitis before the public. Your committee remains hopeful.

COMMITTEE ON MEDICAL ECONOMICS

C. E. DUNGAN, Chairman

I. DEVELOPMENT OF MEDICAL ECONOMICS: There is so close a relationship between medical economics and general economics, that it is difficult to consider the medical phase independently of the general subject. Excepting notations on budgeting household expenses in royal households, history gives very little upon the subject of economics until 1776, when Adam Smith wrote his famous treatise on "Wealth of Nations." These writings inspired the dominant industrial class to make England the world's work shop. This ambition led to the development of the world's center of trade, shipping and international banking, and the world's greatest empire, upon which the English boastfully claim, "The sun never sets," but now ironically, they find themselves helpless to defend. Throughout the 17th and 18th centuries the prevailing teaching was that economics dealt only with production, distribution, exchange, and consumption of wealth, wealth being confined to material goods; raw material, labor and professional service were considered only means of furtherance of production, distribution, exchange and consumption of commodities, the exchange value of which represented the wealth of governments and of society.

Pastuer, in his studies of bacteriology and immunology in 1864, confirmed his contention that bacterial invasion and not spontaneous generation was the cause of putrefaction in contra-distinction to the teaching since the time of Aristotle and Galen, and gave the world the famous Pastuerization method, which saved the wine and beer manufacturers millions of dollars, while greatly decreasing the incidence of disease and mortality, which was being caused by bacteria-laden milk. His immunization method stamped out anthrax in livestock and cholera in fowls again saving millions of dollars, and proved the economic value of medical science.

Pastuer convinced his conferees that human and animal diseases were the result of infection by various types of bacteria and from weak cultures he developed the immunization method which gave medicine and humanity a weapon of enormous value against hydrophobia and other communicable diseases. He gave to medicine more than any man of history. If Hippocrates is the Father of Medicine, Louis Pastuer is the Father of Medical Science and of Medical Economics.

The mercantile idea of economics, namely, that national wealth was confined to profits in commodity sales, prevailed until the beginning of the modern machine age, mass production by the assembly line method, and the compilation of statistical data on the cost of disease in time-loss and medical care, in spite of the convincing proof of the economic value of medical science in the construction of the Panama canal and in making safe a life insurance business of one hundred and thirty billion dollars.

PREVAILING OPINION

There is a prevailing opinion that, as in industry, medicine should follow the trend of the machine age in mass production with the assembly-line method, and that as man-power is replaced with machines and machine tools in factories, medical personnel working in groups, could delegate a greater part of the work to persons trained only in the simple technique of machine operation, and there by turn out a greater amount of medical service at less cost. Such advocates ignore the fact that the physician deals with more than a complicated machine out of working order; that a sick person represents all this, and more; that he is an individuality, moulded after his own individual pattern; that as well as having his physical organism working out of order, the cause of which is often hidden in obscurity, his psychologic behavior is responding adventitiously, and that he not only needs personal care and guidance, but he demands it, and that his psychic sense must be appeased if we get his cooperation in making repairs for him. The further fact overlooked is that the physician is a specially educated and trained individual, not only in the science but in the art of medicine; that while his training includes the technique of operating modern equipment, also he must be able to interpret and evaluate its revelation, and select measures suited to the individual case of illness. Differing from industry, medicinal scientific equipment complicates rather than simplifies procedure. It requires more scientific training and a greater amount of work; and while it may frequently reveal information benefitting the patient, bringing him better medical service, it makes more arduous work for the physician with greater expense to him and consequently to his patient. The attending physician may delegate some of the technical procedure to assistants. Yet, in the last analysis, he must be the judge as to the needs of his patient. It is obvious that by no mass production method can more and better medical service be given, and at less cost.

MEDICINE AS AN INVESTMENT

Differing from investments in factories, stocks, bonds and holding companies, which may be operated, exchanged or sold for profit without personal supervision or contact, medical service is produced by education and training, and must be operated and produced by the owner (physician). Regardless of how much one may invest in medical education and equipment, and how proficient he may become in his profession, he can never become a director or silent investor in his business; he must always produce and sell his own goods.

He may finally be able to sell his product at a better profit and create a greater demand, but for that he must produce a better quality, which requires harder work and longer hours and greater investment in education and equipment. He can never retire in comfort and live sumptuously off of his invested capital (his education and skill), nor sell or liquidate his vested interest at a profit, nor charge it off his balance sheet as obsolete, and start business anew with more modern machinery. Unlike selling commodities by high pressure advertisements, to distribute them in greater and greater quantities and at the best possible profit, whether the purchaser needs them or not, medical service is sold only upon the request of the purchaser, and then only in the amounts to meet his requirement, disregarding his increasing demands. The first purpose of the physician is to give good medical service, and not to seek a market which will consume his surplus commodities at a good profit. His education and ethics forbid his advertising what he has to sell, and even the courts forbid his making false claims for his products. He must first deliver his goods and depend upon his satisfied and grateful customers for his award. No such rule of ethics and fair dealing is practiced by, or demanded of, commodity vendors. You may be sold a passport to heaven, if you can believe advertisements.

Medical ethics and economics are now being copied in certain proposed legislation which, if enacted, will forbid false advertising and high-pressure sales of commodities which may be useless to the purchaser, or in amounts beyond his purchasing ability.

ALL CLASSES SHOULD HAVE SERVICE

It is agreed that good medical service should be obtainable for all classes, irrespective of income. By the same token, good housing, food and clothing, should be available for all classes, but with our present income level neither good medical care nor proper living conditions conducive to good health are available for the low income group. This group may obtain as much medical treatment as those of higher income, but frequently of inferior quality, much of it in the form of patent medicine, most of which is ineffective and needless, and much of the service from physicians is given without pay. All physicians recognize the greater cost of curative medicine over the cost of preventive measures. The higher income group recognize this, and avail themselves of the sources and means against illness, at a saving of cost in money and time loss which frequently forestalls invalidism. The low income group seek medical assistance only when driven by necessity, and then frequently after the damage is beyond repair. We see from day to day deficiency disturbances which in spite of all efforts will render the victim impaired, or a semi-invalid, which may have been prevented with proper living conditions and early medical advice.

This situation is understandable when we are shown the income level of the rural farming, and laboring classes, as given by an authoritative source. This data

shows that 13 per cent of non-farming and 55 per cent of the farmers in the peak years, had incomes of less than \$1,000, and 53 per cent of the non-farming and 82 per cent of the farmers have never reached the "comfort level" of \$2,000 per annum. With an average of \$298 national per capita spendable income, which is the amount remaining after sufficient food and a minimum amount of clothing and housing are purchased, and which runs as low as \$35 in one farming state, and \$83 for all strictly rural population, we can see how impossible it would be to finance a system of compulsory sickness insurance, which is estimated to cost from \$20 to \$30 per capita annually. When we look at these estimates further and observe that in some of the industrial states spendable incomes run as high as \$541 per capita, we cannot help seeing that parity is much out of balance, and that the need for more equitable distribution and economic control is obvious. Much of the blame for indigency is due to our national economic distribution and control. If a semblance of parity of income could be obtained, obviously there would be little indigency, and less need for medical care. Certainly living cost runs higher in urban than in rural communities, but like obtaining medical care, much of this extra cost is due to desire and demand.

We cannot expect an Utopia and it is much easier for us to reconcile the Biblical axiom, "The poor, thy shall have with you always," much easier than the command, "Sell that which you have and give the proceeds to the poor." Until the depression of 1930, much of the medical care of the indigent was provided by philanthropy, church hospitals, and by some taxation. Due to financial losses, most of that source of assistance has passed. The medical profession has always carried the greater part of the load of caring for the poor sick, estimated to amount to \$1,000,000 a day in the United States, but the load has become so increasingly great is beyond the capacity of the profession.

THE DILEMMA:

We now face the alternative of developing some system of caring for the medically indigent or becoming regimented into a lay set-up controlled by a political group, who charge all human failure to laziness and all ambulatory illness to malingering. They ignore the fact that physical efficiency is largely controlled by mentality. Many schemes have been tried; most of them have failed; some are operating tolerably. The Bureau of Medical Economics of the American Medical Association has analyzed the now existing systems. The Dallas County, Texas, plan has met with some success, but it only permits employed persons under 65 years of age, and so does not actually reach the "indigent." The most successful appears to be what is known as the "Iowa Plan" because of its development in that state. This plan seeks to distribute the burden of caring for the indigent among all members of the medical profession and when possible let the patient select the physician of his choice. Funds from this set-up are used for educational purposes and to defray expenses of the organization. On January 1, 1941, there were in the United States 66 plans with a membership of 7,100,000, approved by the American Medical Association. The Federal Emergency Relief Administration has succeeded in the field of medical care of the indigent only when it has cooperated with organized medicine. It is advised that no county society undertake any plan without the consent and cooperation of the state society.

The Arkansas Medical Society has not undertaken any organized plan for the care of the indigent. We have in the state only one strictly charity general hospital with a bed capacity of 205 and 19 bassinets. Of these 205 beds, only 62 are for negroes. This is the University Hospital. There were 4,087 persons hospitalized in this hospital in 1941 with total hospital days of 56,630. The majority of the medical service of this group was administered by the faculty and interns of the University of Arkansas School of Medicine. The University Hospital during the six months, July to December, 1941, had 1,003 on the waiting list. Of this list, about half have been hospitalized. From July 1, 1941, to April 1, 1942, 3,283 were admitted, with an average stay of 14.1 days. During this same period 6,246 received examination and treatment at the Isaac Folsom Clinic.

This is a most splendid service, and is being managed most efficiently and economically by the untiring effort of Mrs. Burte Sanderlin but the hospital facility at the University Hospital is woefully and shamefully inadequate. There is neither hospital room nor available money to meet the existing emergency at the University Hospital. There are hundreds of bleeding tumor cases, producing invalidism and a slow death, which can never be hospitalized with our present hospital facility. A legislature act of 1937, known as act No. 115, is furnishing hospitalization at \$3 a day in accepted private hospitals, paid for out of liquor tax and other state revenue. This fund is limited. Over 14,000 cases were hospitalized under this set-up from February 22, 1937, to April 1, 1942. One of the greatest defects of this service is competent medical service must be "borrowed" from the community, which frequently entails too long a wait before any service is rendered. Consequently, many cases requiring expert judgment must be passed upon by inexperienced interns. Another defect is that all cases must be recommended by the Social Welfare Administration at a great overhead cost, which is always true with any administration operated through politics.

Your committee recommends that a permanent committee be appointed, to work in cooperation with the county societies, the State Welfare Administration, and the Arkansas Legislature, in developing a system for better medical care and hospitalization for the indigent and low-income group. Due to our large Negro population, emphasis should be made for more hospital beds for this group.

Chairman Snodgrass announced that the annual Memorial Session of the Society would be held in the First Presbyterian Church at 8:30 A. M., Tuesday, April 28th.

COMMITTEE ON CANCER CONTROL

VINCENT O. LESH, Chairman

Our attention and efforts have been directed chiefly toward the educational program of cancer control. The Woman's Auxiliary under the leadership of state Commander, Mrs. W. R. Brooksher, of Fort Smith, has continued splendidly the organization and function of the local units of the Women's Field Army.

The executive committee met in Little Rock in January with Mrs. R. N. Herbert of Nashville, National District Commander of the Women's Field Army. The spe-

cial problems and conditions precipitated by the present emergency were discussed. All were agreed that our efforts must be redoubled to actively support the long range program of cancer control.

Reports indicate that the current membership campaign of the Women's Field Army will be as successful as last year in spite of many distracting war-time conditions.

As in previous years seventy per cent of the money received from membership enlistments was returned to the state and disbursed under the direction of your committee. Fifteen thousand pieces of literature on "Cancer" were purchased and distributed. A second sound film, "Enemy X," was purchased. It has been displayed before a number of groups and has been very well received. The picture, "Choose to Live," has had several showings and is very popular. Each member of the committee has available a projector and strip films for presenting lay talks on cancer.

Your committee would strongly recommend that each county society have an active committee on cancer control. There are this year cancer committees in but seventeen of the county societies. An educational program, such as cancer control is, of necessity, a long range program and requires an established, as well as interested, organization.

The following media for presenting cancer to our citizenry have been effectively used: Literature, newspaper articles, radio talks, discussions by physicians before lay groups and motion pictures.

We especially solicit the support and cooperation of physicians for the campaign of the Women's Field Army. Their presentations on cancer have always been enthusiastically received by the public and can be of inestimable value.

May we appraise you, with deep regret, of the loss of your previous chairman, Dr. Fred H. Krock for the duration. His interest and effort in your committee have been profound.

We would also recommend that a vote of thanks be offered to the Woman's Auxiliary and to Mrs. W. R. Brooksher, State Commander of the Women's Field Army, for their tireless efforts in cancer education.

HEART COMMITTEE

A. A. GILBERT, Chairman

The Heart Committee in 1939-40 attempted a partial statistical survey as to the etiology of heart disease in the state of Arkansas. It was found in a very considerable number of instances that diagnosis was incomplete and particularly no statement was made as to etiology. A complete cardiac diagnosis should contain a statement as to etiology, the structural lesions present, the clinical manifestations, the heart's efficiency as a pump, and a therapeutic classification.

It is felt that a proper diagnosis has been the greatest advance in the treatment of heart disease in recent years.

With this idea in mind, the Heart Committee this year prepared a pamphlet outlining the points which have been mentioned. These pamphlets were struck off by your secretary, Dr. Wm. R. Brooksher, and mailed to each member of the Society. They are by no means complete and certainly not original. It is hoped by the committee that they may be used by you as a desk guide in helping you to arrive at a correct diagnosis in your cardiac cases since it is one that conforms essentially to the nomencla-

ture and criteria as set out by the American Heart Association. Not only will the adoption of a standard classification make future statistical study more worthwhile, but will greatly aid in the treatment and prognosis of our cardiac cases. Your committee, therefore, earnestly requests the cooperation of each member of the Society toward this end.

COMMITTEE ON STUDY OF MIDWIFERY

J. B. JAMESON, Chairman

The purpose of this report is primarily to call your attention to the fact that we are still faced with the problem that approximately 25% of all babies born in Arkansas the past year were delivered or attended by midwives. As you will note, approximately one-third of the active midwives in 1941 not only had no permit for the year, but have never had one. This fault, no doubt, is largely due to the fact that the profession, as a whole, is not very interested in the subject. It would appear that by a little more concern on our part we could either, by persuasion or coercion, cause more of these midwives to equip themselves better.

It is thought by some of the committee that it might be best to ask that we be discharged as so little is being accomplished. However, if the fact that we continue to call to your attention these facts, and if it will be as broad cast upon waters to return at some later date in the form of real progress made, our efforts will not have been in vain.

We are indebted to the State Board of Health for at least doing their part as best they could with limited finances and facilities to improve the standard of midwifery.

The State Board of Health issued permits to 864 midwives in 1941 as compared with 905 in 1940. Of these 864 midwives, 142 were apparently inactive, not reporting any births during the year. The remaining 722 permitted midwives reported 5,686 live births delivered during the year, or an average of 7.9 live births per midwife, per year, as compared with 7.3 in 1940.

In addition to these 864 midwives who were issued permits during 1941, there were 949 midwives who were not issued a permit for the year 1941, but who reported attending 3,592 live births, or an average of 3.8 live births per midwife. Of these 949 midwives reporting births in 1941 without a permit, 460 had been issued a permit during some previous year, while 631 had never received a permit.

The previously permitted midwives delivered 2,231 live babies or an average of 4.8 per midwife, while the never permitted midwives delivered 1,361 babies or an average of 2.1 per midwife.

The grand total for the state was 1,813 active midwives in 1941 who attended 9,278 deliveries of live babies, or approximately 25% of all the live babies delivered in the state.

In accordance with the recommendations of the state medical society last year, the State Board of Health employed two negro nurses for training in a school of nurse midwifery. These negro nurses will not be able to enter the course until August, 1942. After six months of training in midwifery these nurses will be assigned to a delta county, probably Crittenden county, for work as nurse midwives in the employ of and under the supervision of the County Health Department. Plans for providing obstetrical consultation and supervision for these nurse midwives have not yet been completed.

COMMITTEE ON MATERNAL AND CHILD HEALTH

S. A. THOMPSON, Chairman
Postgraduate Courses

Last year this committee reported, with reference to the postgraduate courses in obstetrics and pediatrics provided by the State Board of Health from federal funds allotted to them, as follows:

Due to disappointing attendance at these courses, the following program is recommended for the next two years. The health department has \$1,500 available for this purpose each year. There being ten districts in our organization, one physician be selected from the odd number districts this year and the even number districts next year. These physicians are to be allotted \$300 for one month's study in obstetrics, pediatrics or both at any reputable school. The only obligation to this is that, when asked, this physician must appear on programs of our local organizations. These men are to be selected by the President, Secretary and Council of our Society with the approval of the department of health. They should have been in settled practice for not less than five years and not over fifty-five years of age. They are not to be selected from the larger cities or medical centers but from the smaller towns or rural sections.

This report was recommended by the reference committee and approved by the House of Delegates. The State Board of Health submitted the plan to the federal agency concerned with these funds for their approval which was not obtained for several months and then only with the following provisions:

Since all expenditures from these funds must by law be made under the administration of the State Health Department it is required:

1. That the selection of physicians to be granted this training be made by the State Health Department.

2. That the selection of places where the postgraduate training is taken be limited by the State Health Department. "Intramural postgraduate courses in obstetrics or pediatrics under the supervision of State Health Departments are being conducted in the following central states: at the universities of Nebraska, Iowa, Chicago, Michigan, Indiana and Louisiana."

3. That preference in the selection of physicians be given those conducting prenatal clinics or child-health conferences in cooperation with the health department.

To date only one physician in the state has applied for one of these scholarships. This physician indicated before the declaration of war that he would elect the University of Chicago in the spring or summer of 1942. In view of the war it is not known whether this physician still intends to take this course.

Full-time Obstetric Consultant

This committee assisted the State Health Department in locating and employing a full-time obstetric consultant, Dr. Guy P. Slaughter, August 1, 1941. Dr. Slaughter held lectures in obstetrics in Camden, El Dorado, Prescott, Magnolia, Fort Smith, Fayetteville, and in three centers in Benton county. In South Arkansas a series of five lectures were presented in each city. The average attendance at each session was nine. In the lecture series presented at Fayetteville and in Benton county there was an average attendance of ten for four different sessions. The lecture series at Fort Smith was poorly attended, ten physicians being present at the first, three at the second, and two at the last and concluding session. From this evidence it was concluded that such attempts at post-

graduate education were carried out more successfully in the smaller cities. The consultant was also available in these areas for consultation on private patients of the local physicians. During this time five consultations were provided at the time of actual delivery. Six postpartum consultations, four gynecological operative consultations, and approximately eighteen prenatal consultations have been provided. Two county medical societies have been addressed concerning some special obstetrical topic. Several clinics for prenatal and postnatal examinations of indigent patients have been organized. These include clinics at Fort Smith (twice a month), Texarkana (four times a month), Camden (once a month), Winslow (once a month). In Garland and Crittenden counties clinics were already being conducted each week. An attempt was made to visit these clinics and to improve the service that they are rendering. Other clinics that are being conducted at the present time, but not as successfully as desired, are held at Newport, Morrilton, Blytheville, Arkadelphia and Helena. These clinics are being visited periodically in an attempt to improve the standard of prenatal care that they offer. In addition, clinics are being proposed in the defense areas of Pine Bluff, Bauxite and Benton since there is a problem of adequate care for the increased population in these areas.

The following table shows where each of these clinics is located, how often each clinic meets, and who conducts it.

Prenatal Clinics

Location	Frequency	Clinician
Fort Smith—		
Sparks Memorial Hospital	Monthly	I. F. Jones, M.D.
St. Edwards Hospital	"	I. F. Jones, M.D.
Twin City Hospital	"	I. F. Jones, M.D.
Texarkana—Health Department	Weekly	Dr. Robinson
Camden—Health Department	Monthly	Perry Dalton, M.D.
Winslow—Local Church	"	Ruth Lesh, M.D.
Hot Springs—		
Health Department	Weekly	R. E. Smallwood, M.D.
Leo N. Levi Out-patient Dept.	"	Staff
Marion—Health Department	"	B. M. Stevenson, M.D.
Newport—School Building	Monthly	M. B. Owens, M.D.
Morrilton—Health Department	"	W. P. Scarlett, M.D.
Blytheville—		
Health Department	"	K. T. Moseley, M.D.
Dyess Colony	"	K. T. Moseley, M.D.
Arkadelphia—Health Department	"	W. B. Prothro, M.D.
Helena—Health Department	"	J. T. Herron, M.D.
Little Rock—Medical School	Bi-weekly	Staff Medical School

During 1941 there were 1,594 patients admitted to prenatal clinic services throughout the state. This includes the 520 at the medical school, but is exclusive of the out-patient department of the Leo N. Levi Hospital at Hot Springs. These 520 patients at the medical school made 2,427 visits to the clinic or an average of 4.66 visits per patient. The remaining 1,074 patients throughout the state made 1,944 visits to clinics or an average of 1.81 visits per patient. A positive blood Wasserman was found in 196 or 12.3% of these patients. Public health nurses made 7,994 visits to 3,409 prenatal patients and 5,517 postpartum visits to 2,481 patients and assisted physicians at 62 home deliveries.

Full-time Pediatric Consultant

The State Board of Health employed Dr. Pauline M. Kearney as a full-time pediatric consultant in April of 1941. The pediatric consultant has duties similar to those of the obstetric consultant; case consultation with local physicians, lecture courses on request, establishment of child health conferences and improvement of the quality of pediatric care given at these well-child conferences. As in the case of the prenatal clinics these child clinics are only set up with the approval of the local medical society and are conducted either by the health officer or

a local physician employed part-time. The following table shows where such clinics have been set up, the frequency of meeting, and who conducts them.

Child Health Conferences

Location	Frequency	Clinician
Morrilton	Bi-monthly	R. C. Williams, M.D.
Marion	Monthly	L. C. McVay, M.D.
Hot Springs	Bi-monthly	R. E. Smallwood, M.D.
Newport & Grand Glaize	Monthly	M. B. Owens, M.D.
Little Rock—		
Medical School	Weekly	J. E. Jones, M.D.
Health Department	Weekly	P. M. Kearney, M.D.
Little Rock—Health Department	Weekly	All pediatricians in rotation for 6 mos.
Texarkana—Health Department	Weekly	H. K. Abrams, M.D.
Pulaski County—4 Health Dept...	Monthly	All L. R. Pediatricians in rotation.
Blytheville—		
Health Department	Monthly	K. T. Moseley, M.D.
Dyess Colony	Monthly	K. T. Moseley, M.D.
Forrest City—Health Department	Monthly	C. V. Powell, M.D.
Fort Smith—4 Clinics	Monthly	L. A. Whittaker, Jr., M.D.
Arkadelphia—Health Department	Monthly	W. B. Prothro, M. D.
Sparkman—Local School	Monthly	J. E. M. Taylor, M.D.
Russellville	"	Robert Hood, M.D.
Danville	"	Robert Hood, M.D.
Atkins	"	Brooks Teeter, M.D.
Lamar	"	Guy Shrigley, M.D.
Harrison	"	Ulys Jackson, M.D.
Forrester	"	J. W. Redman, M.D.
McCrory	"	J. F. Hayes, M.D.
Carthage, Ellisville & Hampton	"	R. C. Kennerly, M.D.
Conway & Cleburne Co.	"	Max Baldridge, M.D.
Drew County—Rural	Bi-monthly	A. S. J. Clarke, M.D.
Jonesboro	Monthly	A. C. Modelevsky, M.D.
Helena	Monthly	J. T. Herron, M.D.

In addition a small number of children are seen in most health departments even when no regular conference has been developed.

During 1941 2,350 infants made 3,417 visits to child health conferences an average of 1.5 visits per infant. A total of 5,052 children between 1 and 5 years of age made 6,285 visits to these clinics, 1.2 visits per child. Public health nurses made 11,103 visits to 4,674 infants, an average of 2.4 visits per infant. 13,496 nursing visits were made to 8,348 pre-school children, an average of 1.6 visits per child. Physical examinations, feeding instructions, methods of child care, immunizations, cod liver oil, and in a few instances milk were furnished at these clinics.

Maternal Death Study

There has been a total of 385 questionnaires returned, 225 white deaths and 160 negroes. Copies were made of these returns removing all identifying data such as name of patient, address, name of hospital, names of towns, and all names of physicians. These copies were divided among five obstetricians who were asked to study and classify them according to the following points:

1. The probable cause of death.
2. Their opinion as to whether the death was avoidable or unavoidable if conditions had been ideal.
3. If the death was probably avoidable under ideal conditions who or what was at fault.

The results of the study show that in the opinion of these obstetricians 39 of the reports had insufficient data to classify them even as to cause of death while 4 were probably non-puerperal-pregnancy having no relationship to the death. Consequently these 43 deaths were omitted from the study leaving a total of 342 maternal deaths in the study, 200 white and 142 negro.

The classification according to cause of death was as follows:

	White	Black	Total
1. Abortions and miscarriages	48	36	84
2. Toxemias and nephritis.....	68	63	131
3. Hemorrhage (including ectopic)	37	15	52
4. Sepsis	33	19	52
5. Other causes (cardiac, embolus intercurrent infections, anesthesia and surgical shock) 14		9	23
	200	142	342

In their opinion 238 or 70% of these deaths were avoidable under ideal conditions, that is, suitable social and economic status of the patients, hospitalization available, intelligent and cooperative patients, and attended by properly qualified physicians with competent obstetric consultation. The classification according to whether the death was probably avoidable or unavoidable was as follows:

	White	Black	Total
Avoidable	131	107	238
Unavoidable	30	13	43
Insufficient data	39	22	61
	200	142	342

The blame for the death in the case of the 238 which were probably avoidable under ideal conditions was placed as follows:

	White	Black	Total
Social and economic conditions (Financial inability to obtain competent medical care, nutrition, etc., lack of prenatal care, lack of hospitalization, etc.).....	36	34	69
Patient's fault (Failure to obtain competent medical care or to follow instructions.)	37	28	65
Physician's fault (Neglect, error in obstetrical judgment.)	51	10	61
Midwife's fault (Lack of knowledge, asepsis and failure to call for medical assistance in time.).....	7	35	43
	131	107	238

In 25% of these avoidable deaths it was the opinion of the obstetricians that the attending physician was at fault through neglect, technique, or judgment, yet our postgraduate courses are poorly attended, and we have one applicant for the five obstetrical scholarships available.

Recommendations

1. Continue all methods of postgraduate education.
2. Continue to develop clinic facilities for charity maternity and pediatrics.
3. Continue these studies for the purpose of guiding postgraduate education.
4. Approval of standard orders to public health nurses for ante-and post-partum visits.

Public Health Nurses'
STANDING ORDERS FOR MATERNITY AND
NEWBORN NURSING CARE
ANTEPARTUM

Medical Supervision

Refer every ante-partum patient to a physician for medical supervision and consultation regarding plans for delivery.

When ante-partum cases are already registered with their physicians, obtain the written consent and instructions of these physicians before giving ante-partum nursing care. (Forms L5B and L5C Rev. are suggested for obtaining their instructions.)

Reports of Nursing Service

Send a written report of each nursing visit to the physician in charge of the patient. (Form L5D may be used for this purpose.)

Instruction of Patient

A. Hygiene of Pregnancy.

1. Cleanliness—baths twice a week. Sponge bath instead of tub baths after the seventh month.
2. Care of breasts—after the seventh month daily washing of nipples with mild soap and water and drying with soft towel. Apply albolene or mineral oil with finger tips to the nipples. Up-lift brassiere for support.
3. Rest—lie down at least once during the day and several times, if possible.
4. Sleep—at least eight hours every night with windows open.
5. Exercise—walks outside in the fresh air daily. Usual housework, no heavy lifting, no long auto rides.
6. Diet—simple, balanced meals for normal pregnancy, including:
 - a. One quart of milk a day. (Cottage cheese, milk-soups, etc., may be substituted for some of this amount.)
 - b. Meat, fish, cheese or legumes—using liver once or twice a week.
 - c. Eggs three or four times a week.
 - d. Vegetables—potatoes and two others, with green leaf and raw ones used frequently.
 - e. Fruits—citrus fruits or tomatoes, others fresh, dried or canned.
 - f. Cereals and breads—one or both at every meal. (Half of those used should be whole-grain cereals or breads.)
 - g. Fats in moderate quantities.
 - h. Tea, coffee, and sweet foods sparingly.
 - i. Avoid fried foods and rich pastries.
 - j. Total of two quarts of fluid, including milk, water, fruit juices, and other beverages.
7. Clothing—loose clothing for comfort. No round garters or tight bands. Abdominal supports for relief of backache and abdominal strain. Low broad heels.
8. Elimination—if diet and hygiene fail to relieve condition, report to physician.
9. Teeth—advise dental examination, and suggest foods containing calcium.
10. Marital relations. Intercourse is to be avoided after the seventh month of pregnancy and during the time a menstrual period would have occurred had the patient not become pregnant. Women who have had abortions are advised to avoid intercourse during the entire period of pregnancy.

11. Mental hygiene—normal life, with moderate amount of diversion, and freedom from worry.

B. Preparation for Delivery—advise regarding:

1. Supplies for home or hospital delivery. (See suggestive list prepared by State Board of Health. Consult physician for special supplies he desires.)
2. Plans for the nursing care of patient and baby.
3. Plans for the care of the family during the delivery and lying-in period.

C. Complications—report complications to the physician immediately. Also insist that the patient consult her physician. The following emergency instructions may be given until definite instructions can be obtained from him:

1. Edema. For slight edema of feet, advise rest and elevation of legs. Do not wear round garters or wide bands. The right-angle position may be suggested except in case of a cardiac disability. Report edema of hands and feet and especially edema of eyelids to physician at once.
2. Varicosities. For varicosities of legs and vulva, be sure patient wears no tight bands; advise use of side garters and rest with feet elevated. For varicosities of vulva, advise elevated Sim's position. Report to physician. Report hemorrhoids to physician, and suggest a diet to prevent constipation, as advised by physician.
3. Symptoms of Toxemia. (Headache, dizziness, disordered vision, pain in stomach, drowsiness, excessive gain in weight.) Advise rest in bed. Measure and record fluid intake and output. Advise restricted diet—no carbohydrates, low protein and salt-free food—until orders can be obtained from physician. Report at once to physician.
4. Nausea and Vomiting. Suggest that patient try eating a cracker or dry toast, or taking some simple sugar in the form of hard candy, or drinking a glass of orange or tomato juice before she gets out of bed.
5. Vaginal Bleeding. Put patient to bed and report to physician. Suggest saving evidence of bleeding for physician.

POSTPARTUM

Mother

Postpartum Hemorrhage

Send for a physician. Hold the fundus firmly between the fingers and massage it gently if necessary to keep it well contracted. Give an oxytocic drug if there is an order and the drug is at hand. Elevate the foot of the bed. Apply ice cap to lower abdomen. Allow water to drink. Keep the patient reassured and warm with light covers. See that the air in the room is fresh.

Oozing may come from perineal lacerations. This may be controlled by holding a sterile pack to the site until the doctor's arrival.

Bleeding may be coming from the cervix. If none of the above attempts to control the bleeding is successful and the doctor has not arrived, grasp the fundus firmly with both hands and bring it well forward in the abdomen in a position of antelexion. This may cut off the blood supply to the cervix. Hold the fundus in this position, if it controls the bleeding, until the doctor gets there.

General Care

- A. Take temperature, pulse, and respiration.
- B. Bath—give cleansing bath. Normal patients should be encouraged to take their own sponge baths after the second day.
- C. Perineal care—cleanse perineum with boiled water and soap.
- D. Breasts—if breasts are engorged, apply supporting binder. Cleanse nipples before and after nursing with boiled water. Special orders should be obtained for cracked and sore nipples, and for inflamed areas or lumps.
- E. Abdominal binder—if wide binder is worn, it should be removed after the first five days.

Instruction of Patient—Hygiene of postpartum period.

- A. Diet—advise liquid or soft diet for first day; then full diet unless ordered otherwise. Have patient avoid fried and spicy foods, and foods that usually disagree with her. When patient is up, advise normal diet with a variety of foods daily.
- B. Exercise—while in bed have patient lie flat on stomach for twenty minutes twice a day. Get additional orders from physician.
- C. Stay in bed—normal patients may sit up in chair on ninth day, and walk on the tenth day.
- D. Elimination—consult physician if patient has not voided within twelve hours after delivery. Instruct normal patient to take one tablespoonful mineral oil on the third day. Give three times a day for three days and as needed. If patient has had stitches, give mineral oil on the fifth day. If patient has not had bowel movement 48 hours after mineral oil was given, give enema.
- E. Intercourse—instruct patient to avoid intercourse until baby is six or eight weeks of age.
- F. Postpartum examination—urge patient to return to physician six weeks after delivery for detection and correction of ill-effects of the strain of pregnancy.

Baby**Bleeding from Cord**

Tie tightly and securely with sterile tape; apply sterile dressing and firm binder. Notify physician. Apply pressure if ligation does not stop bleeding, and hold until physician arrives. Watch for further bleeding.

Daily Care of Newborn

Normal infants; take temperature; give sponge bath or oil bath depending on physician's orders; inspect cord dressing daily and change when necessary, applying dry sterile dressing; cleanse genitals with oil and oil all creases; record weight; prepare separate bed for baby so that proper temperature may be maintained. **Premature infant and infants in poor condition;** do not bathe; cleanse with warm oil; keep warm enough to maintain body temperature of 98.6 F. varying not more than one-half degree above or below; handle as little as possible; and protect from infection.

Feeding

Allow baby to nurse for five minutes at both breasts when eight hours old, then every three to four hours for five, ten, fifteen, or twenty minutes as ordered by the physician.

Give cooled, boiled, and unsweetened water every two hours until the mother's milk appears. Then give baby water between each feeding.

Complications. Report to physician:

- A. Bleeding from cord—see above.
- B. Protruding umbilicus. If umbilicus is clean and dry, make deep vertical fold of skin and apply tight adhesive 1½ inches wide. Advise to see physician.
- C. Diarrhea—urge complete rest; discontinue feeding; give plain, boiled water; and notify physician.
- D. Excoriated buttocks—cleanse with oil; instruct mother regarding care of child and diapers. Further instructions should be obtained from physician.
- E. Inflamed eyes—take smear; notify physician or responsible authority at once.
- F. Fluid in breasts—handle as little and as gently as possible. Report any change in condition of breasts to physician.

Well-Child Supervision

Urge mother to take baby to physician when breast-fed baby is six weeks of age and bottle-fed baby is three weeks of age, and at regular intervals thereafter, for instruction as to feeding and general supervision.

COMMITTEE ON POSTGRADUATE INSTRUCTION

D. A. RHINEHART, Chairman

(Read by Jos. F. Shuffield, Secretary)

On October 22 and 23, 1941, the Tenth Two-Day Course of Postgraduate Instruction was held at the Medical School in Little Rock. The features of this program consisted of a symposium on "The Clinical Use of the Vitamins," another on "The Use of the Sulfonamide Drugs," and a presentation by the Doctors' Secretaries Club of Little Rock on "Some Important Features in the Business of the Practice of Medicine." There were other items on the program that made it well rounded and of interest to all classes of physicians. This meeting was well attended, there being 106 in attendance. Because of a comfortable balance in the Committee's treasury, the registration fee was \$3.00 instead of \$5.00. At this meeting each of the speakers made an abstract of his subject material. This was mimeographed and given to each of the doctors in attendance for further study and future reference.

A meeting of the Postgraduate Committee was held on the second day, and it was decided to have another two-day course in January, 1942. However, shortly thereafter the United States became actively engaged in a world-wide war, automobile tires were rationed, and many of the doctors were called to military service. For these reasons, the program committee decided it probably would be inadvisable to attempt the meeting in January.

The only other activity of the Committee has been in publicity. We circularized the doctors of the state for a meeting at which Dr. George T. Pack of The Memorial Hospital in New York was the guest speaker. His subject was "Cancer of the Stomach." A number of physicians from over the state attended this session.

The Committee still has a comfortable balance in the treasury. The Committee is watching the attendance at this meeting of the state medical society in order to get some idea, if possible, as to whether or not it will be advisable to attempt further sessions in Little Rock during the present emergencies.

COMMITTEE ON SYPHILIS CONTROL

DAVIS W. GOLDSTEIN, Chairman

(Read by the Secretary)

The Committee on Syphilis Control acts in an advisory capacity to the State Health Department. The division of venereal disease control of the state is directed by Doctor D. W. Dykstra. In those counties where there is no health officer in charge local doctors are furnished drugs for treatment. Selectees who have been treated have created a problem, especially in areas where there is no health officer, but local doctors have volunteered to give treatment to those who are unable to pay. We understand that remuneration is being considered by the Government in the rehabilitation program of selectees.

At present there are only fifty per cent of those deferred for syphilis now under treatment. It is the opinion of the Committee that local doctors cooperate to increase this number when called upon.

There were 2,469 cases of syphilis reported by private physicians during 1941; 10,954 by the health department personnel. Cases of gonorrhea reported: 1,660 by private physicians; 1,770 by the health department.

There were 100,085 arsenical treatments and 99,216 bismuth treatments administered by the State Health Department personnel in 1941.

The State Hygienic Laboratory performed the following tests:

Smears for gonorrhea	positive	930
	negative	2,801
Syphilis Blood Wassermann	positive	25,302
	doubt	9,305
	negative	127,466
Spinal fluid	positive	134
	doubt	29
	negative	447

We recommend that an extra effort be made to report all venereal diseases; also that treatment be given when necessary to Selectees who are unable to pay when the state has no facilities to treat them; that private and hospital laboratories check their serological reports often with the State Laboratory. This will aid in more efficient work in private and hospital laboratories.

Before using a donor for transfusion, he should have, in addition to a routine serological test, a physical inspection.

We wish to commend the State Health Officer and personnel for the efficient work being done on venereal disease control.

HISTORY OF THE ARKANSAS MEDICAL SOCIETY

FRANK VINSONHALER, Chairman

The Committee wishes to report that its work is now completed. There remains for publication the history of one county medical society and subsequent to its appearance in The Journal, offer will be made to the members to purchase the History in bound paper volumes at a cost of about thirty-five cents. Publication in booklet form is contingent, however, upon the receipt of sufficient advance subscriptions to cover the cost of such publication.

By motion (S. A. Thompson-Hunt) that the History of the Arkansas Tuberculosis Association as furnished by the association be included with the

History of the Arkansas Medical Society in booklet form provided the tuberculosis association guarantees sale of sufficient copies to provide for the additional cost.

COMMITTEE ON LIAISON WITH ARKANSAS TUBERCULOSIS ASSOCIATION

A. C. SHIPP, Chairman

The need for maintaining high standards of health in war time is obvious. The facts about tuberculosis remain unchanged. What is different is the attitude. Tuberculosis is a definite obstruction to victory, acting like sand in the gears of the production and fighting machine; therefore, our motivation appeal to the public is not "personal security" alone but "patriotic duty." Historically, all past wars have been followed by a "hump" in the tuberculosis death rate curve. The stage can now be set so that the present downward slope of the "hump" can be accelerated and aggressive efforts can drive that curve downward to a point where it shall never rise again. For the first time in history we have the combination of a plastic society and the scientific knowledge to achieve that aim. This is our greatest health education challenge, and to this end we have entered upon a second ten-year joint program of offensive war against tuberculosis to further which we recommend:

1. That committee be appointed by the governor to study facilities available for the care of the tuberculous, cooperative methods of rehabilitation of arrested and cured cases, and a planned program looking toward more adequate control of tuberculosis; this to be composed of one representative from the State Department of Health, a member of the state legislature, a member from the Arkansas Medical Society, a member from the Arkansas Tuberculosis Association, one representative from the Department of Public Welfare and the superintendents of the state sanatoria.

2. That present law regarding physical examination of teachers be amended to read: "All school personnel, including teachers, janitors, bus drivers and food handlers shall show X-ray evidence of freedom from pulmonary tuberculosis."

3. That the Arkansas Medical Society establish a standard for accreditation of counties in their program of human tuberculosis control. This standard shall be uniform with that being adopted by other state medical societies. Any county meeting this standard shall be awarded a certificate of accreditation. To certify for accreditation, a county must have a death rate of less than 10 per 100,000 and a record of less than 15% reactors to the tuberculin test among its high school seniors, of which at least 80% must be tested.

By motion (Ware-Hames) report amended to include dormitory students in all state schools in addition to school personnel for whom chest X-ray examinations are recommended.

COMMITTEE ON INDUSTRIAL HEALTH

E. E. BARLOW, Chairman

In view of the increasing importance of the health of the worker in the war emergency, it has become necessary that a program of industrial health be put into operation in Arkansas. Inasmuch as all health plans should

center around the medical profession, this Committee expects to carry out, insofar as possible, the following plan (or recommends that the following program be executed):

1. Increase the teaching of industrial health in the University of Arkansas Medical School. The recommended course for this subject was published in February 28, 1942, issue of the Journal of the American Medical Association and can be adapted to suit our needs.

2. The formation of a plan of postgraduate education for physicians on industrial health which will also be of interest to industry. The state of Iowa had nine Industrial Health Institutes in 1941. The details of the institutes were published in the Journal of the American Medical Association, February 22, 1942. A smaller series can be held in various cities in Arkansas.

3. A working arrangement will be attempted with an employers' group such as the Chamber of Commerce or Manufacturers' Association to help put into effect a program to improve health supervision of industrial workers.

To make a well-rounded program the activities of nursing organizations, health departments, employee and interested agencies will be included.

4. The following counties have sufficient industry to warrant the appointment of committees on industrial health by the county medical societies: Ashley, Bradley, Jefferson, Newton, Phillips, Arkansas, Pulaski, Sebastian, and Union. They will be urged to form such committees to work with this state committee in carrying out a program. They can also stimulate their societies to consider industrial health in their meetings.

In those plants where a complete health maintenance program is advisable, either because the industrial management is desirous of such a program, or because the surveys indicate that such a program should be adopted, the medical phase will be introduced. Thus, the complete program will consist of the following features.

1. Treatment of injuries as now carried on by plant physicians.

2. Physical examinations (pre-employment and periodic) by plant physician for the purpose of revealing health deficiencies and placing the employees where impairments will not be a handicap, or where the job will not interfere with physical disabilities.

3. Educational lectures to employees by plant physician or other authority on health protection, including occupational disease control and prevention of adult diseases. The value of proper nutrition may be cited as an example of this feature.

4. Absenteeism records by plant management.

5. Engineering surveys by State Department of Health.

6. Venereal disease and tuberculosis case finding studies by State Department of Health.

7. Periodic visits to plant by the Directors of District Health Services, State Department of Health, and plant physician to assist the management in any phase of the program and to correlate the activities of the State Department of Health and the medical profession. In connection with this feature, the plant physician will be asked by the management to visit the plant during the engineering survey, or some other time, so as to observe the methods of operation and use of materials.

It should be mentioned that industry is rapidly becoming cognizant of the benefits to be derived from a complete health maintenance program such as outlined above and that some plant managers are ready for such a program now. It remains, however, for some agency to introduce the program and to outline the details of its operation. This, we believe, can best be done through the

existing Industrial Hygiene Division of the State Department of Health by the acting medical director of that division.

This program is to be carried on in cooperation with State Committee on Industrial Health, Arkansas Medical Society, and the county medical societies. It would be advisable for the state committee to notify the plant physicians that the management will request a visit by them to the plant for the purpose of observing the methods of operation. This is suggested by the Council on Industrial Health of the American Medical Association.

The committee will be kept informed of future developments in regard to this program.

This committee recommends that the subject of industrial health be included in the program of annual meetings of the Arkansas Medical Society. Also, that an official representative be sent to the Fifth Annual Congress on Industrial Health sponsored by the Council on Industrial Health of the American Medical Association.

Medical societies throughout the country are becoming more active in this field, and it is the aim of this committee to see that the Arkansas Medical Society keeps pace with the developments of preventive industrial health.

COMMITTEE ON MENTAL HYGIENE

GEO. B. FLETCHER, Chairman

We, the Committee on Mental Hygiene, after careful study, beg to submit our report and will ask that it receive your consideration.

1. The State Hospital is now prepared to administer all types of shock therapy to those in whom the treatment is indicated, and we hope that the medical profession over the state will visit the hospital and familiarize themselves with what is being done along this line.

2. Better psychiatric teaching, in fact as good or better than anywhere else in the south, will be forthcoming after the new psychiatric unit has been established at the University of Arkansas School of Medicine.

The following legislation is proposed.

3. A bill to provide a thorough psychiatric examination of every inmate of our penal and correctional institutions. This service to be rendered by trained psychiatrists outside the state hospital staff. With such a record the parole board would be able to consider scientifically each application for release from the institutions. Society will, in this way, be protected against release of incorrigible recidivists.

4. A bill to provide for the sterilization of the mentally unfit.

5. A bill to repeal Act 119 of the 1937 legislature which provides a severe penalty for receiving alcoholic patients at the State Hospital. Many of these individuals are psychotic and alcoholism is merely a symptom. The hospital authorities cannot determine this without complete examination and observation of the individual over a period of time. This law has worked confusion and hardship on the families of these patients as well as the authorities in the communities from which they come.

6. A bill providing for adequate salaries and better living conditions for members of the staff of the State Hospital in order that competent psychiatrists can be obtained and retained on the staff. Many native sons, who have been lost to eastern institutions, would prefer to live here if conditions were right. There should be a ratio of one physician to every 150 patients which is the standard set by the American Psychiatric Association.

7. A bill providing for the reorganization of the State Hospital similar to the Kentucky law. This to provide (a) a director of the hospital and method of employment and discharge of this officer; (b) a change in commitment laws; (c) a state-wide mental hygiene program.

The present three units of the State Hospital being widely separated make efficient administration difficult on account of the many details imposed on the superintendent under the present plan. The additional expense under this plan would be meager compared to the increase in efficiency of operation of the entire institution. The present commitment law was passed in 1883 when the hospital was first founded. When the constitutional amendment was adopted by the people, providing for transfer of probate matters from county courts to chancery courts, it automatically carried with it the commitment of patients to the State Hospital by the chancery court. This has proved very burdensome on account of the large chancery districts. The present law is antiquated. The bill should provide for voluntary admissions, admissions on certificate of two physicians, admission on request of a health or peace officer, the staff to decide the need for hospitalization. It should provide for court commitments where the patient must be hospitalized against his will.

The need for state-wide mental hygiene program is great and should not be postponed longer than can be helped. However, just now with world conditions as they are we may have to defer action on this matter. If every physician in the state would give more attention to the State Hospital and its problems both he and the hospital would benefit.

8. We recommend approval by this society of the proposed amendment to the constitution sponsored by the Civitan Club of Little Rock which would stop the political turn-over in the membership of the boards controlling our various state institutions thereby eliminating the so-called "packed" boards.

REPORT OF THE STATE MEDICAL BOARD OF THE ARKANSAS MEDICAL SOCIETY

D. L. OWENS, Secretary

The Secretary of the State Medical Board of the Arkansas Medical Society makes the following report of the activities of this Board since the last meeting of the Arkansas Medical Society in 1941.

The Board has had three meetings during the past year; two regular meetings and one call meeting.

During the past year, thirty-one students of the University of Arkansas Medical School have taken their preliminary examination, which covers the five primary branches given by the Board, and all passed this examination successfully. At the June meeting in 1941, nine students of the university successfully completed the last half of the examination, and fifty-one students from the university took and completed the whole examination. These sixty students, after passing the examination successfully, were issued licenses to practice medicine in the state of Arkansas by this Board.

Within the past year, eighteen physicians from various states secured reciprocity with the state of Arkansas and were granted licenses by this Board to practice medicine in this state. Also, four physicians received licenses with Arkansas through reciprocity from the National Board of Examiners.

There have been two duplicate licenses issued after satisfactory proof had been sent to this office that the licenses of these two doctors had been destroyed.

Thirty-three physicians have been certified by this Board to various other state boards for licensure.

Five licenses have been revoked by this Board for violation of the Harrison Narcotic Law. Two licenses have been restored by this Board following the payment of the penalty for the violation of the Harrison Narcotic Law. Seven licentiates have been put on probation by this Board to the extent that the physicians holding the licenses must not re-apply for their narcotic permit for a certain number of years as specified by their probation following sentence by the Federal Court.

During the past year, there have been three prosecutions by the state Board and county societies for the illegal practice of medicine. These prosecutions resulted in two convictions, and in the third case, the Board was not successful in securing a conviction due to local politics and sentiment, even though the guilty man admitted his guilt, and evidence was clearly in favor of the state Board.

Your secretary attended the annual meeting of the Federation of State Board Secretaries in Chicago during February of this year. The meeting was held in joint session with the meetings on Medical Education and Hospitals.

Three new members took their places on the Board during the past year to replace the three members whose terms had expired. The new members on the Board are: J. T. Matthews, Heber Springs; J. B. Jameson, Camden; and L. J. Kosminsky, Texarkana. Dr. Kosminsky is filling the vacancy due to the death of the late P. H. Phillips of Ashdown.

After the passage of the Registration Law by the 1941 State Legislature, there were 1,245 who paid their registration fees for the year of 1941. For the year 1942, 1,169 physicians have paid their registration fee. Some of the men who paid their 1941 fee have not paid their 1942 fee, therefore, these men are delinquent and will not find their names in the regular registration list in the front of the pamphlet, but will have to look in the delinquent list. Also, some of the men will not find their names in the pamphlet at all because they paid their fees after the pamphlet was sent to press March 1, 1942. Up to the present time, April 1st, there is a delinquent registration of 76 physicians who have paid their fee for 1941 but have failed to pay their fee for 1942. This is possibly due to the fact that many of these men are serving in the U. S. Army or Navy and are laboring under the belief that they do not have to pay this annual registration fee. This was possibly brought about by the fact that the Arkansas Medical Society waived the dues to this society of those men who are serving in the army or navy for the duration of the war; but the state Board felt as if they could not do this, due to the fact the registration fee is fixed as a Legislative Act, while the dues to the medical society were not set by a Legislative Act.

During the year 1941, and up until the present time, there have been eight deaths that this office has been able to check as members who had paid their fee or fees under this new registration law. According to the information we have, there have been 29 deaths from the ranks and files of the physicians in this state during the time from March, 1941, until the present time.

I know that there has been some dissatisfaction over the state because of this annual registration fee. This law was passed in the Arkansas Legislature, but the Legislature only passed the law at the request of the Legislative

Committee of this society, and the Legislative Committee drew this law at the request of the House of Delegates of this body. Therefore, there should be no objection to paying this fee, and after this law came into effect, it became the duty of this Board to collect same. It has been a very difficult and undesirable piece of work for the Board to handle. It has increased the work of the secretary's office about ten-fold, but we are doing the best we can. There are some men scattered over the state who are still not paying this fee, but as fast as we are able to locate and contact these men, we are doing our best to get them to pay. After the bill is explained, they fall into line most readily.

There are a number of violations of the Medical Practice Act taking place in our state every day, but these cannot be coped with unless this Board has the full co-operation of each doctor and county society. This Board wishes to assure you that we are giving you our best co-operation in trying to weed out and correct these irregularities. You know as well as we, that in some instances local sentiment will play a big part, and whether we will be able to stamp out irregularities in such locations remains to be seen. But, that will not keep this Board from trying to do what we can, provided we can get the help of the local society wherever such irregularities occur, because unless the local societies will do all they can in the way of cooperation, the hands of our Board will be tied in most cases.

The Board hopes it will continue to have the same support from this body in the future that it has had in the past.

REPORT OF THE DELEGATE TO THE
AMERICAN MEDICAL ASSOCIATION

E. E. BARLOW

Attention is directed to the fact that a report of the proceedings of the 1941 annual session of the American Medical Association has been published in editorial form in the August, 1941, issue of The Journal of the Arkansas Medical Society.

By motion (Barlow-Ware) the report of the delegates to the American Medical Association as so published was adopted.

REPORT OF THE COUNCIL

EUCLID M. SMITH, Chairman

The activities of the Council for the past year have been very light. In the early part of the summer, the Council took steps with the Board of Medical Examiners to curtail the activities of Dr. Brinkley, which Mr. Peter Deisch will tell you about more in detail. There has been no called meeting of the Council since adjournment last year.

REPORT OF WOMAN'S AUXILIARY

For the year 1941-42 the program of the Auxiliary has been carried out through 23 auxiliaries. Two auxiliaries have disbanded during the year, due to various reasons, such as doctors being called into military service and transferred, very small memberships, and illnesses. However, two new auxiliaries have been organized. These are in Hot Spring county and Craighead-Poinsett counties.

Through these two auxiliaries, we have added 24 new members to the roll. Dues were sent to the Auxiliary to the American Medical Association showing 369 members for the state.

The Auxiliary has cooperated with the Medical Society and lay groups in all phases of Health Defense work, as we have been asked to do. We have stressed Public Relations, Cancer Control, subscriptions to Hygeia, annual physical examinations, the Erle Chambers Library Fund, and essay contests in schools. Also important in our year's program has been emphasis on the Ilse F. Oates Student Loan Fund, Doctors' Day Observance, and Education and Public Health.

Early in the year plans the purposes for the year's work, based on the outline sent by the Auxiliary to the American Medical Association, were submitted to the Advisory Board and following their approval, were sent out to the county presidents.

The President has traveled approximately 8,000 miles in the interest of the Auxiliary and has written about 1,000 communications.

As you know, the Auxiliary operates only under the direction and supervision of the Medical Society, and is always identified in that way.

The Auxiliary sends cordial greetings, and wishes for you, our doctors, a most successful convention.

Respectfully submitted,
MRS. CALVIN CHURCHILL, President,
MRS. F. Q. WYATT, Secretary.

President Jones presented Lt. Comdr. R. J. Calcote, Naval Hospital, Corpus Christi, Texas, who expressed his happiness in being able to attend this session of the Society. Comdr. Calcote said that leaves from naval duty could only be obtained for emergencies and to attend medical meetings and that he had talked the Commandant out of three days to be with his state Society.

REPORT OF THE TREASURER AND OF THE
ACTING TREASURER

An audit of the accounts of R. J. Calcote, Treasurer, for the period April 13, 1940, to January 15, 1942, is as follows:

Balance on hand.....	\$10,609.31
Receipts:	
Arkansas Medical Society.....	10,500.00
Journal	10,500.00
Dividends	337.50
Interest	47.78
Total.....	\$31,994.59
Disbursements:	
Vouchers Nos. 1107-1293 inclusive.....	\$19,403.48
Balance—January 15, 1942.....	\$12,403.48
Cash	\$ 112.50
Building and loan stock.....	7,500.00
Savings account	986.71
Checking account	3,804.71
	\$12,403.48

Dr. R. J. Calcote entered active naval service in January, 1942, and by action of the Council, the secretary was appointed acting treasurer. An audit of his accounts for the period January 15, 1942, to April 18, 1942, is as follows:

Balance on hand	\$12,403.48
Receipts:	
Arkansas Medical Society.....	4,000.00
Journal	3,000.00
	<hr/>
	\$19,403.48
Disbursements:	
Vouchers Nos. 1294-1318 inclusive.....	\$ 2,065.55
	<hr/>
Balance April 18, 1942.....	\$17,337.98
Building and loan stock.....	\$7,500.00
Savings account	986.71
Checking account	8,851.22
	<hr/>
	\$17,337.98

Respectfully submitted,
W. R. BROOKSHER, Acting Treasurer.

REPORT OF THE SECRETARY

The membership of the Society today is 1,000. One year ago it was 948. The Council has authorized waiver of annual assessments to members in good standing during 1941 who have entered the military service and these physicians are carried on the roster as active members.

The past year has been one of increasing activity. With the coming of war new and intensified duties have been placed upon the organization and the membership. The foresight of organized medicine in its preparedness program has been justified and the data compiled has been of much value to the military and federal services in their expansion. Established on the request of physicians themselves, the Procurement and Assignment Service is now functioning to correlate the demands of governmental agencies for medical men with the needs of the civilian population. There seems to be some confusion over the work of this agency. It is solely advisory and can neither induct a physician into military service, nor can it keep him out. It is hoped that by careful attention to the needs of all the nation at this time, that the military services will secure adequate medical personnel, and that the civilian population will be similarly provided. In Arkansas there have been no delays in the operation of the program. The county committees have given hearty cooperation.

Your secretary has served as an assistant to the state chairman on Emergency Medical Service for Civilians, Dr. W. B. Grayson, in establishing county and local organizations for this most important defense activity. Several counties have efficient, tested units. It is hoped that all counties will complete their organization within the shortest possible time.

An audit of the Society's affairs shows that its income during the period April 15, 1940, to March 31, 1942, was \$23,513.47, from the following sources: Dues \$9,605.00; advertising \$11,524.76; advertising rebates \$1,005.55; reprints \$45.00; sale of stock in radio station KARK \$900.00 and final dividend from American Exchange Trust Company, Little Rock, \$433.16. The current financial position of the Society is presented in the report of the Acting Treasurer.

Violations of the medical practice acts should receive more attention from county medical societies. During the

year but two such violations were reported to the Society office. In each instance, the cooperation of the State Medical Board of the Arkansas Medical Society was received and prosecution carried out. The examining board has advised all county societies that it stands ready to assist in all such cases but asks, properly, that the county society itself ascertain the violation, make proper investigation, and cooperate with the board. We urge county societies to carefully watch for violations. In times of stress, the medical profession cannot afford to slacken its efforts toward maintenance of the highest standards in the healing arts.

During the year your secretary has attended the sessions of the American Medical Association, the annual State Secretaries Conference, two procurement and assignment conferences, five councilor district medical society meetings, the sessions of the Tri-State Medical Society (meeting in Arkansas), and numerous county society meetings and committee conferences.

We are now engaged in a total war. There is no question but that the economic status of each of us will materially change within the years that are ahead. Unless we as individuals and as an organization heed the warnings that appear, we may anticipate more than our share of difficulties during the war and in the post-war period. You will be called upon to accept changes which are even now apparent. The utmost in your stamina will be required to meet the issue.

American medicine will do its part in this war as it has always. We shall answer each call in this emergency; we will buy war bonds; we will work to elevate morale among the fighting forces; we will live and work as good, honest, God-fearing American citizens, doing a good job just a bit better each day, until happier days of peace again come.

For the cordial cooperation and assistance of the officers and members in the work of the secretary's office, we express gratitude and know that we have served the best group of doctors in the world.

Respectfully submitted,
W. R. BROOKSHER.

REPORT OF COUNSEL

HON. PETER A. DEISCH

We find it difficult in the serenity and unhurried quiet of this atmosphere to realize the deeply distressing realities of the outside world, where the brave sons of America are offering their lives, that our ideals and freedom may continue undisturbed. Yet their importance is so profound, and so far overshadows all other thoughts, that by comparison with it, all our personal activities and aspirations shrink into insignificance. Subconsciously our thoughts are with the flag which must symbolize in the future, as it has symbolized in the past, the highest hope of mankind.

While the program will reflect that we are living in a world at war, other features will take into account that normal activities of civilian and professional life will carry on. The work of physicians individually and as a group being indispensable to the American system, must be continued more vigorously than ever.

REGISTRATION:

The past year has seen the registration law put into effect. A re-registration law previously applied to the eclectics, to nurses, and to practically all other professions, including engineers, lawyers, architects, accountants

and beauty operators, so that our law is no novelty. Its relative advantages and disadvantages were weighed for a long time before your Society decided to ask for the enactment of that law. Now, no longer will it be necessary for us to wonder who is qualified to practice under our laws, for there will emerge a roster of physicians which will grow more accurate with the passing years. Future issues will contain a revision of the laws of interest to the profession, when changes occur, and will afford a ready knowledge of many subjects that frequently arise, and a study of the present issue will prove beneficial. That law will provide a source of funds, which will be available for the investigation of those guilty of violations of the medical practice act, and for their suppression.

Prior to our last legislative contest with the chiropractors, several members of that calling had been indulging in improper advertising, and there has recently been a return of that condition. Chiropractors are now bound by the same laws with respect to advertising as is your profession, which is prohibited from "advertising his business or remedies by untruthful or improbable statements made in his advertisements, circulars or cards." A similar statute has been declared constitutional by our court in the case of state medical board v. McCrary, 95 Ark. 511, where the court said that the words "'chronic and incurable' when used with reference to diseases of the human body, are not variable, but have a settled and generally accepted meaning"; and "untruthful and improbable" statements would probably likewise be held to have a definite meaning, when applied to human ailments. Only that advertising is illegal in which the advertiser makes untruthful and improbable statements. If it is found advisable to put a stop to such practice, it would be proper to use the fund from registration for the expense of such litigation.

VENUE:

The venue of a lawsuit is in that county, where it may properly be filed and tried. Act 314; 1939, provides that suits for a wrongful act, shall be brought in the county where the accident occurred, or in the county where the person injured or killed, resided at the time of his injury. In the case of Heller v. Williams, decided by our Supreme Court on April 13, 1942, the court held that under the "Venue Act" a case of malpractice can be brought in the county or plaintiff's residence. Under that holding a physician who treats a patient from other counties in this state than that of physician's residence, could be forced to leave the county of his residence where the treatment was administered, and defend malpractice suits filed against him by patients anywhere they reside in the state. The seriousness of this situation may be readily appreciated. Mr. Justices Greenhaw, McHaney and Holt dissented from the majority holding.

Aside from the case against Norman Baker and associates, and that of Dr. Brinkley, (not yet disposed of) the government employed the criminal law of "using the mails to defraud" in our state, for the successful prosecution of Dr. Frazier, of Woodruff county, who had built up a large mail-order business in the sale of a sulphuric acid compound, which he called Heavy Vitamins, and for which he made glowing promises.

No other local matters of large importance having arisen since my last report, attention will be called in the remainder of this paper to recent tendencies of the courts elsewhere.

INJUNCTIONS:

The use of the injunction to prevent the unauthorized practice of medicine is being looked on with more favor

by the courts as time passes and in a majority of cases it is the best remedy. The courts are now generally holding that the right of a licensed physician to practice his profession is a valuable franchise in the nature of a property right, to protect which he may sue in equity in the interest of himself and other physicians similarly situated, to enjoin a person from encroaching upon that right by improperly engaging therein. A court is not powerless to prevent the doing of an act involving encroachment upon valuable franchise rights of others merely because such conduct is denounced as a public offense.

This right of the licensed practitioner, springing from concepts of unfair competition, to be protected in equity logically is limited to such conduct as represents an improper or unlawful diversion of patronage, as when the defendant unlawfully, because unlicensed, takes economic benefits from the pool of medical practice, or permits himself to be used to put corporations, or other unqualified persons, directly or indirectly in competition with individual practitioners.

The Arkansas law, now entertained by a majority of courts, notwithstanding the existence of penal statutes, carrying penalties which might be invoked by criminal prosecutions, will not defeat the equitable jurisdiction of courts, provided the plaintiffs show in their complaint that the legal remedies so provided are inadequate to protect their interests and break up the wrongful conduct. The latest case announcing this rule, is that of Van-Hovenberg v. Holman, 201 Ark. 370, which did not involve the question of medicine in any way, but related to a different subject-matter.

The important points in such a suit are:

(1) Suits in equity by individual practitioners for injunction against improper practice depend essentially on a showing of unfair competition. They should therefore be brought by active practitioners in the same community engaged in such field of practice as makes it clear that the improper practice of defendant impinges on their economic interests.

(2) Such a suit should be in the form of a "class bill" for the benefit of the plaintiff himself and of all physicians similarly situated. Such a suit may not properly be brought by the state society or a component society.

(3) When unfair competition can be shown, it is no necessary part of the plaintiff's proof that the defendant's conduct constitutes malpractice in respect to the patients treated. He need not show that the treatment was ignorant or negligent.

(4) Lacking the essential elements of unfair competition necessary to show unfair or unlawful diversion of patronage, the mere fact that the defendant's conduct was ignorant, unskillful or negligent so as to confer rights of action on his patients for injuries received in the course of treatment will not create equitable rights in fellow physicians.

DUTY TO REFER PATIENT:

A decision of general interest was recently handed down in Massachusetts, and as it was based on the common law, and not on statute, it would be applicable here. The defendants were dentists and were sued for malpractice. They injected procaine hydrochloride by pressure in the plaintiff's gums on several occasions, before removing 4 abscessed teeth. In consequence severe osteomyelitis of plaintiff's jaw developed. The evidence showed that the danger of such a sequel was rather slight, but that other dentists in the community could have reduced the risk to almost nil because they were

equipped to use "deep block" anaesthesia, which the defendants did not know how to apply. In affirming a judgment for \$4,450, based on negligence, the highest appeal court of Massachusetts said:

"The defendant contends that negligence could not rightly have been found since danger was remote. But remoteness of danger is a matter of degree. Though the danger was remote, it might, none the less, involve an unreasonable risk of harm to the plaintiff, to which dentists, in the exercise of the skill required of them, should not have exposed him." This is particularly true where, as here, the possible harm was of a serious nature. A finding of negligence was not precluded, even though there was a substantial probability that harm might not actually result from the use of this method of anaesthesia. A choice by a dentist of a 'less safe method' rather than another 'well-known method' may constitute failure to exercise the requisite skill in extracting the plaintiff's teeth. There is nothing to show that any emergency required the use of the 'less safe method' or that a safer method was not available for the plaintiff at the hands of some other dentist. Nor is there anything inconsistent with the idea that the dentists should have advised the plaintiff to employ another dentist equipped to use a safer method of anaesthesia, rather than have undertaken a 'less safe method.' Such may be the duty of a dentist who, for any reason, is unable personally to exercise the skill ordinarily exercised by dentists in the community." *Vigneault v. Dr. Hewson*, 15 N. E. (2) 185.

There are many cases in which practitioners have been held negligent in failing to seek X-ray examinations in diagnosing or following up cases of fractures, even though they themselves owned no X-ray apparatus, and the use of the required facilities would have required the original physician to refer the patient to some one else, or to call in a consultant with a portable machine, or to surrender the care of the patient to a hospital.

This duty of reference, which so lately has entered into cases at law, is of importance because of the increasing disparity between the equipment an individual physician can afford and that available in hospitals or other medical institutions.

This discussion shown conclusively that meetings such as the one now beginning, are not only desirable, but are almost imperative, for treatment must conform to the modern state of the science for a physician to be immune to liability for malpractice. Treatment is not permissible simply because it once had the approval of medical science. The law does not prescribe what is old; if some measure used in early days is still good medicine, it may be used with impunity. But duty lies on the physician to conform his practice to the modern state of the science. He may therefore be negligent in using an obsolete method no longer employed by the active practitioner. Physicians are therefore under the legal duty to keep apprised of major developments and abandoned doctrines.

A physician is entitled to choose among currently sanctioned methods of treatment without liability for failure to use some other method. A physician cannot be held negligent for using a less desirable treatment than the one of choice if both have current medical sanction. Testimony of other physicians that they would have done otherwise is therefore not enough to make out negligence; they must be willing to say that what defendant did or failed to do was improper in the light of average practice. The right of the physician to choose between alternative methods is jealously guarded by the law.

If further explanations are desired on any matters discussed in the booklet which will be distributed at this meeting, by the state medical board, or any other question relative to the law, I hope you will let me hear from you.

By motion (Allbright-Rush) the following amendment, proposed at the 1941 annual session and published in the November, 1941, and in the January, 1942, issues of *The Journal of the Arkansas Medical Society*, was adopted:

ARTICLE VI

The Council shall consist of the Councilors, the President, the Secretary, the President-Elect and the Treasurer.

The House then proceeded to select the following Nominating Committee: 1st District, W. W. Verser; 2nd District, L. T. Evans; 3rd District, A. F. Barr; 4th District, E. E. Barlow; 5th District, S. A. Thompson; 6th District, R. C. Dickinson; 7th District, J. M. Proctor; 8th District, Jos. F. Shuffield; 9th District, D. K. McCurry; 10th District, S. J. Wolfermann.

The House of Delegates adjourned at 12:20 P. M.

FIRST GENERAL SESSION APRIL 27, 1942

The meeting was called to order by President Jones at 2:00 P. M.

The invocation was given by A. C. Kolb.

Mayor Leo P. McLaughlin, Hot Springs National Park, extended a welcome to the Society.

L. G. Martin, President, Garland County Medical Society, extended the welcome of that Society.

H. E. Murry, Texarkana, responded to the addresses of welcome.

Past-president E. E. Barlow then took the chair.

President Jones read the annual President's Address (page 1).

The scientific program followed.

"The Problem of Cerebral Palsy and Its Relation to Rehabilitation and Public Health," W. M. Phelps, Baltimore.

"The Importance of Spas in Military and Civilian Defense Program," Walter S. McClellan, Saratoga Springs, New York.

"National Physician's Committee for the Extension of Medical Service," Mr. John M. Pratt, Chicago.

PUBLIC MEETING ARLINGTON HOTEL APRIL 27, 1942

The meeting was called to order by L. G. Martin, President, Garland County Medical Society.

The invocation was given by Rev. Homer T. Fort, First Methodist Church.

President H. Fay H. Jones was then introduced and presided.

Mrs. C. A. Churchill, Batesville, President, Woman's Auxiliary to the Arkansas Medical Society, was introduced.

Addresses were given as follows:

Mrs. J. U. Reaves, Mobile, President, Woman's Auxiliary to the Southern Medical Association.

Lt. Col. Clyde M. Beck, Medical Replacement Center, Camp Robinson, Arkansas.

Hon. Homer M. Adkins, Governor, the State of Arkansas.

The benediction was given by Rev. Homer T. Fort, First Methodist Church.

MEMORIAL SESSION First Presbyterian Church APRIL 28, 1942

The meeting was called to order by President Jones at 8:40 A. M.

The invocation was given by Rev. Homer T. Fort, First Methodist Church.

Messrs. Edward Barry and W. C. Brown, accompanied by Miss Josephine Brown at the organ, sang "Come Unto Him."

Mrs. E. L. Thompson, Hot Springs National Park, read the names of the deceased members of the Auxiliary.

W. A. Snodgrass, Little Rock, Chairman, Committee on Necrology, then read the names of the deceased members of the Society.

IN MEMORIAM

Simeon J. Hesterly, Prescott, May 2, 1941.
Stephen S. Jones, Calico Rock, May 7, 1941.
John Cicero Hughes, Hoxie, May 13, 1941.
Aaron A. McKelvey, Van Buren, May 21, 1941.
John R. May, Little Rock, June 5, 1941.
James Meek Sheppard, El Dorado, June 9, 1941.
John Jefferson Johnson, Harrison, June 26, 1941.
Sidney Harris, Herbina, July 28, 1941.
Hugh E. Longino, Texarkana, September 2, 1941.
Wylie R. Holloway, Center Ridge, September 11, 1941.
Earnest Burnette, Hattiesville, September 13, 1941.
Nathaniel S. Word, Camden, October 9, 1941.
John Dana Robbins, Mount Ida, October 29, 1941.
William A. Kriesel, Little Rock, October 30, 1941.
Thos. Douglass, Ozark, November 7, 1941.
Julius Abram Bogart, Forrest City, November 17, 1941.
Ernest LaFayette Handley, Pocahontas, December 9, 1941.
James Anderson Burks, Benton, December 20, 1941.
Clinton Amos Hardesty, Paragould, January 10, 1942.
Ernest H. Harris, Coy, January 15, 1942.
Robert Wakeman Cupp, Marmaduke, January 17, 1942.
Alphonse Francis Pirnique, Little Rock, February 2, 1942.
Benjamin Edward Hendrix, Gillham, March 15, 1942.
Ernest Harl White, Little Rock, April 12, 1942.
Orlando C. Hankinson, Pine Bluff, April 14, 1942.

The Memorial Address was read by W. H. Mock, Prairie Grove.

MEMORIAL ADDRESS

W. H. MOCK
Prairie Grove

I stand this morning before the task assigned to me with a sad heart realizing my inability to speak words that shall be worthy of this occasion.

We are reverently gathered here in the peace and quiet of the hour to turn again with mournful rustling the leaves of memory and pay a tribute of love and friendship to our colleagues whose chairs are empty, whose places are vacant.

So it seems fitting for us to meet in memory of those whose faithfulness and loyalty in service shall remain forever a hallowed benediction.

A place is vacant that will not soon be filled, a bright light is missing around the fireside social circle and sick chamber.

They were genial, gracious, kindly gentlemen who treated all who came within the circle of their influence, rich or poor, exalted or lowly, with the same rare exquisite courtesy. Theirs was the noblest type of American manhood, self-made and self-reliant. To the poor and humble they were always accessible, no sacrifice too great, no service too honourous; ready to perform the most menial duty when the good of humanity was involved. Their hearts were the storehouse of virtues that shown forth in luminous light to comfort and gladden the lives of others. Their names and fame will live in the annals of medicine, and the vital force and influence of their noble lives will abide so long as time shall last.

If the sound of their voices could come back to us from the silent shore, they would remind us of the nobility of service and sacrifice and the duty to minister unto others. They would have us remember the spirit of American patriotism, that the finest thing in life is to live for your country, to help make it safe and secure, a better purer nation and to protect it against invasion and evil influences and preserve our great American privileges, that heritage we treasure of liberty, freedom and the pursuit of happiness. The things that sweeten the air we breathe and fill our souls with pride.

We are a great brotherhood, inspired with the same hopes and ambitions. We must act with tolerant understanding and function at all times on a high plane consistent with the dignity and purposes of our profession realizing that the world needs an unimpaired manhood and that the health of an individual or a nation is an index to their military and economic possibilities. We must not permit ourselves to be plunged

into the abyss of pain, terror and disorder, nor retreat before the ranks of disease and lose the ground we have gained in scientific advancement in promoting the health and welfare of our nation.

We accept the torch from fallen hands. We must hold it high and light the way to honor, truth and unselfishness. Remembering that public good is superior to private gain and that selfishness will defeat our purposes, narrow our outlook, and dim the horizon of our usefulness.

In this war stricken world we are offered two ways of life. One exalts the state as supreme, subordinates the individual to its demands, making men mere cogs in a cruel relentless machine crushing out all semblance of personal worth and freedom, bent on conquest of territory with mastery over even the minds of men. The other is based upon honor, truth, equality and justice, bound by the principle of the sacredness of personality, proclaiming the intrinsic worth of every man, with normal freedom for every human soul.

If we hope to maintain our present social and civic level, perpetuate our moral and religious standards, preserve our American way of life, we must fertilize the minds and hearts of our citizenry with courage, determination and American loyalty. We must instill into their souls faith, hope, and love, faith in God and in themselves. Faith keeps us steadfast. It's the thing that makes us carry on. Love for our country and the thing it represents. Love is the strong arm of mercy and charity that reaches out its generous hand to the sick and distressed in every land. Hope for the future. It is the anticipation of things as they ought to be. Without it the world would be dismal and spiritually dead. It is the sunbeam of the dreary day. It is the starlight of the darkest night of despair.

One of the beautiful things about true friendship it lives always. And one of the grandest traits of humanity is the loving bonds with which it clings to the past.

We should recall the foresight, vision and courage of the past, also its hardships, struggles and privations designed, built and endured for the present. It enters into the becoming vision of the young and the backward dreams of the old. We must not permit the din, clank and distress of the hour to push back the horizon of memory, or blur the perspective of established customs and traditions or let the purple haze of forgetfulness dim the canvas of the past or permit the tinsels that overhang the path to pleasures playground lure us from thoughts that

should be treasured forever in memories casket. Treat the past with reverence and respect, keep its good and noble things and build upon them for without it we could have no present or future.

You cannot close the flood gates of the past, you cannot dam the stream of memory. But you can direct it into brighter channels. You may have remorse in your soul for the things you have done. A cry in your heart for the things you have lost. But you will have a smile on your face and a song on your lips for the things you have found.

We trust that we may possess the things necessary to safely pilot us through the intricate perils that await us. We hope that soon their will be a cessation of world hostilities and that cruelty and tyranny will be banished beyond the horizon of civilization. We pray, that finally the fabric of justice and good will may extend across the continents and enfold them in a mantle of contentment, peace and brotherhood.

Messrs. Edward Barry and W. C. Brown, accompanied by Miss Josephine Brown, at the organ, sang "Calm is the Night."

The benediction was given by Dr. Olin McKindrey Jones, First Presbyterian Church.

SECOND GENERAL SESSION

APRIL 28, 1942

The meeting was called to order by President Jones at 9:30 A. M.

The scientific program was then presented in order.

"Puritis Ani," Ralph E. Crigler, Fort Smith. Discussed by H. E. Murry, Texarkana, and Ralph E. Crigler, in closing.

"Clinical Manifestations of Prostatic Disease with Special Reference to Their Treatment by Transurethral Resection," Charles Paddock, Fayetteville. Discussed by H. King Wade, Hot Springs National Park; G. W. Reagan, Little Rock, and Charles Paddock, in closing.

"The Kidney in Hypertension," W. J. McMartin, Omaha.

"Contact Dermatitis," E. P. Cope, Little Rock. Discussed by A. F. Hoge, Fort Smith, and E. P. Cope, in closing.

"An Analysis of Results of Thoracic Surgery at the University of Arkansas School of Medicine and Hospital," J. K. Donaldson, Little Rock.

The second general session then adjourned.

THIRD GENERAL SESSION

The meeting was called to order by President Jones at 2:00 P. M.

The scientific program was then presented in order.

"The Etiology and Treatment of Traumatic Shock," C. M. Wilhelmj, Omaha.

"Phytobezoar: Report of A Case," A. F. Hoge, Fort Smith.

"Recent Developments in Ophthalmology," Lawrence Post, Saint Louis.

The Society then met in joint session with the Arkansas Tuberculosis Association, A. C. Shipp, Little Rock, President, Arkansas Tuberculosis Association, presiding with President Jones.

The following scientific program was presented, speakers introduced by J. D. Riley, State Sanatorium:

"The General Management of Tuberculosis in the Home," H. Frank Carman, Dallas.

"Finding Tuberculosis," H. Lee Fuller, Little Rock.

"Artificial Pneumothorax in the Treatment of Tuberculosis" (motion picture).

The third general session then adjourned.

SECTION OF OPHTHALMOLOGY AND OTOLARYNGOLOGY

APRIL 28, 1942, 9:00 A. M.

Chairman Raymond Cook, Little Rock, presided.

The following scientific program was presented:

"Local Sulfathiazole in Sinusitis," John Smith, Little Rock.

"Pitfalls in Ophthalmic Surgery," Lawrence Post, Saint Louis.

A luncheon and round-table discussion followed.

Officers elected are: Chairman, Raymond Cook, Little Rock; Vice-chairman, Virgil L. Payne, Pine Bluff; Secretary-treasurer, K. W. Cosgrove, Little Rock.

On Tuesday evening, April 28th, members and visitors were guests of the Garland County Medical Society at a Social Hour held in the Arlington Hotel. The annual banquet session, Frank Vinsonhaler, Little Rock, toastmaster, with the President's Reception and Dance followed.

FOURTH GENERAL SESSION

APRIL 29, 1942

The meeting was called to order by President Jones at 9:00 A. M.

The scientific program was presented in order.

"Hypertension: Newer Theories, Prognosis and Treatment," J. N. Compton, Little Rock. Discussed by S. W. Douglas, Eudora, H. T. Smith, McGehee, J. C. Land, Hoxie, and J. N. Compton, in closing.

"Is Prescription Writing Becoming a Lost Art?," Mr. Herbert Parker, Jonesboro. Discussed by Earle A. Hunt, Clarksville, J. C. Land, Hoxie, S. J. Wolfermann, Fort Smith, J. N. Compton, Little Rock, W. H. Mock, Prairie Grove, and Herbert Parker in closing.

"The Surgical Problem of Perforating Peptic Ulcer," M. B. Bowman, Hot Springs National Park. Discussed by S. J. Wolfermann, Fort Smith, G. E. Cannon, Hope, and M. B. Bowman, in closing.

"Sex Hormones: Physiology, Diagnosis Therapy" (with motion pictures), D. K. Kitchen, Detroit.

The fourth general session then adjourned.

SECOND SESSION HOUSE OF DELEGATES

APRIL 29, 1942

The meeting was called to order at 1:30 P. M. by President H. Fay H. Jones.

The following delegates and members seated as delegates by action of the House of Delegates answered roll call:

ARKANSAS—R. H. Whitehead; BENTON—Geo. M. Love; BOONE—D. L. Owens; CARROLL—D. K. McCurry; CHICOT—E. E. Barlow; CLAY—J. E. McGuire; COLUMBIA—W. P. Cooksey; CRAIGHEAD-POINSETT—J. H. McCurry, W. W. Verser; CRITTENDEN—A. C. Parker; CROSS—A. F. Barr; DESHA—H. T. Smith; FAULKNER—N. E. Fraser; GARLAND—Foster Jarrell, J. M. Proctor, Driver Rowland; HEMPSTEAD—G. E. Cannon; HOWARD-PIKE—W. H. Toland; INDEPENDENCE—C. A. Churchill; JEFFERSON—Fred Hames; JOHNSON—J. M. Kolb; LAWRENCE—J. C. Land; LINCOLN—L. T. Taylor; LITTLE RIVER—B. C. Routen; MONTGOMERY—J. H. McLean; NEVADA—A. S. Buchanan; OUACHITA—S. A. Thompson; PULASKI—Jos. F. Shuffield, Fred W. Harris, T. Duell Brown, Glenn H. Johnson, Grady W. Reagan, Joe H. Sanderlin; SEBASTIAN—C. W. Hall, S. J. Wolfermann; SEVIER—R. C. Dickinson; SAINT FRANCIS—J. O. Rush; UNION—D. E. White, J. B. Wharton, Jr.; WASHINGTON—W. H. Mock; WOODRUFF—C. E. Dungan.

Other members of the House of Delegates present were:

President Jones, Past-presidents Buchanan, Barlow, Fletcher, H. T. Smith, W. H. Mock, M. L. Norwood, S. J. Wolfermann and W. T. Wootton.

Councilors L. T. Evans, J. O. Rush, S. W. Douglas, B. L. Moore, Euclid M. Smith and Clyde McNeil and Secretary Brooksher.

E. E. Barlow then presented the report of the Nominating Committee:

President-Elect—S. J. Allbright, Searcy; E. D. McKnight, Brinkley; H. E. Murry, Texarkana.

First Vice-President—L. G. Martin, Hot Springs National Park.

Second Vice-President—R. C. Dickinson, Horatio.

Third Vice-President—S. A. Drennen, Stuttgart.

Treasurer—Paul L. Mahoney, Little Rock.

Secretary—W. R. Brooksher, Fort Smith.

Councilor, Second District—L. T. Evans, Batesville.

Councilor, Fourth District—S. W. Douglas, Eudora.

Councilor, Sixth District—C. E. Kitchens, DeQueen.

Councilor, Eighth District—Jos. F. Shuffield, Little Rock.

Councilor, Tenth District—Clyde L. McNeil, Rogers.

Delegate to the American Medical Association—E. E. Barlow, Dermott.

Alternate to the American Medical Association—H. Fay H. Jones, Little Rock.

By motion (Rush-Land) the report of the Nominating Committee was accepted.

The Secretary read a communication from H. E. Murry, Texarkana, requesting that his name be dropped from the list of nominees for President-Elect. By motion (Wharton-Kolb) the name of H. E. Murry was dropped from the list of nominees for President-Elect.

J. O. Rush, S. A. Thompson and T. Duel Brown were appointed tellers and the House proceeded to ballot on the names of S. J. Allbright and E. D. McKnight for President-Elect. S. J. Allbright received a majority of the votes on the first ballot and was declared elected President-Elect.

By motion (Rush-Cannon) the nominees for the other officers were declared elected by a rising vote.

S. J. Allbright presented the report of the Reference Committee.

REPORT OF REFERENCE COMMITTEE

The report of President H. Fay H. Jones was excellently prepared and showed a thorough grasp of all matters concerning the Society. We endorse his suggestion as to the National Physician's Committee and urge all individual physicians to encourage this movement. We endorse the further organization of physicians for civilian defense. We endorse provision for increased facilities at the University Hospital and especially do we heartily endorse the establishment of a nurse's training school.

We recommend that the incoming President appoint a committee, as suggested in the President's address, for the further study of Group Hospital Insurance, and that such report be submitted at the next annual session.

We greatly appreciate the work of the Women's Auxiliary and recommend that a definite sum be appropriated annually for the publication of their Year-Book. We suggest that the sum of \$100 be made available each year.

We commend the Committee on Scientific work. Considering the number of physicians in military service, we regard the program as being most desirable.

The Committee on Medical Legislation has functioned with its usual efficiency. Its suggestion as to a composite board should, in our opinion, receive further study, and probably should not be attempted until the emergency is passed. We bespeak their continued vigilance in guarding against any proposals to lower the standards of medical education.

The Committee on Health and Public Instruction is commended for the brevity and thoroughness of their report. We appreciate the work of our Health Department in connection with the Selective Service examinations. The Health Department, as operated, is receiving much approbation and but a minimum of criticism.

In commending the work of the Public Relations Committee, we recommend that its excellent work be continued.

The report of the Medical Economics Committee showed much careful study. Lack of time has prevented this Committee from being able to make any definite suggestions as to the recommendations, but we do suggest that the Legislative Committee endeavor to provide increased facilities at the University Hospital. We suggest that no county society put in operation any plan such as suggested in the report without the consent of the state Society.

While the Committee on Scientific Exhibits did not make any report, the excellent result achieved by it speaks for itself.

We commend the work of the Cancer Control Committee and their good report.

We thoroughly appreciate the work of the Heart Committee, especially in the preparation and the distribution of the desk guide.

The report of the Committee on Maternal Welfare was very comprehensive. We endorse their suggestion as to post-graduate education, as well as other recommendations made by the Committee.

We commend the work of the Postgraduate Study Committee, and defer to their opinion in regard to holding future sessions during the emergency.

We commend the report of the Syphilis Committee.

We join the Committee on Liaison with the Arkansas Tuberculosis Association in suggesting that the Governor appoint a committee on rehabilitation. We also endorse the accreditation of counties on the basis of freedom from tuberculosis. We ask that the Legislative Committee make a study in changes in the law so as to provide for proper inspection of all school employees and of students in dormitories.

We commend the report on the Committee on Midwifery and suggest that individual doctors endeavor to see that midwives secure permits.

The conciseness of the report of the Secretary reflects in a very inadequate manner the large amount of detailed work that passes through his office, and which is always handled promptly and efficiently. The initiative, diplomacy and earnestness which he brings to the discharge of his duties are large factors in the continued progress of this Society.

In the temporary desertion of the Treasurer's office by R. J. Calcote, we realize that he is rendering a yet larger service to his state. No report that he has ever made

has been more satisfactory than his appearance before us as a naval officer.

We commend the excellent report of the Women's Auxiliary and their excellent work.

The report of our Counsel, Peter A. Deisch, called attention, among other things, to a recent decision of our Supreme Court to the effect that a suit for malpractice can be filed and tried in a county other than that of the residence of the doctor who is being sued. We recommend that the Legislative Committee give attention to this matter so as to restore the former practice as to venue.

We appreciate the work of the History Committee, and suggest that the history of the Arkansas Medical Society be published as prepared. We do not recommend including the history of the Arkansas Tuberculosis Association for two reasons: 1st, the history of the Arkansas Medical Society is all ready to go to press and this would mean some delay; 2nd, the history of the Arkansas Tuberculosis Association is of such importance that it should be taken up as a separate project.

We endorse the recommendations of the Committee on Industrial Health.

The report of the Committee on Mental Hygiene contains food for much thought. We suggest to the Committee on Legislation that Act 119 (1937) preventing alcoholics from being admitted, be repealed.

The report makes several recommendations. The committee has studied these recommendations, and goes on record as follows: 1st, concerning proposed legislation for psychiatric examination of all inmates of our penal and correctional institutions. This committee feels that at the present time we should not make any recommendations. 2nd, the proposal to provide for the sterilization of incorrigibles would not be advisable at this time. 3rd, we endorse a change in the law concerning the reorganization of the State Hospital along the line of a bill which was defeated in the last Legislature. 4th, we recommend the approval of any measure designed to stop the political turn-over of boards which manage our State institutions.

We commend the report of the Council.

The report of the State Board of Examiners shows the care and diligence of that board in seeing that the law is being scrupulously observed as to admissions to practice. We urge the cooperation of individual practitioners with the board in endeavoring to stamp out unauthorized practice. Local doctors should report to the Examining Board all irregularities with sufficient detail to enable the board to proceed with investigations.

We commend the work of the Committee on Medical Education and Hospitals. Their detailed report indicates much careful study of their subject.

We commend the work of the Committee on Medical Benevolences, which was appointed in 1941, and suggest that the same committee be retained for further study.

By motion (Barlow-Rush) the report of the Reference Committee was adopted.

Euclid M. Smith read the report of the Council.

APRIL 27th

Allowed Auxiliary one hundred dollars for publication of Yearbook. Approved necessary expenses of Commander of Women's Field Army and of the organization. Nominated honorary members. Allowed honorarium of secretary-editor and of the counsel. Ordered expenses

of 67th annual session paid. Nominated E. H. McCray and M. Y. Pope for affiliate fellowship in the American Medical Association. Ordered treasurer to purchase War Bonds with funds now in savings account.

APRIL 28th

Appointed Secretary Brooksher, Chairman of Council, President Robins as State Procurement and Assignment Committee. Appointed Chairman Smith, Owens, Buchanan, Brooksher, Gebauer and Deisch as a committee to confer on provisions of basic science law.

APRIL 29th

Appointed committee (H. T. Smith, J. F. John and E. E. Barlow) to study honorary membership and make recommendations at next meeting. Adopted vote of thanks to the Garland County Medical Society, the Arlington Hotel, the Auxiliary to the Garland County Medical Society, the press and the citizens of Hot Springs National Park.

By motion (Barlow-Rush) the report of the Council was received.

H. T. Smith presented the report of a special committee from the House of Delegates on benevolences, appointed at the 1941 session.

You will recall that at our last meeting a Committee on Medical Benevolence was appointed, this committee has investigated the plans now in operation in other states.

Here are the states that have reported some action along this line.

Alabama—Journal of the Medical Association of Alabama, July, 1934, pages 26-36.

Pennsylvania—Pennsylvania Medical Journal, September, 1936, page 1046.

Colorado—Colorado Medicine, August, 1936.

Illinois—Illinois Medical Journal, Vol. 73, No. 1, July, 1938.

California—California & Western Medicine, Vol. 52, No. 6, June, 1940, page 260.

New York—New York State Journal of Medicine, Vol. 40, No. 12, June 15, 1940, page 938.

Louisiana—New Orleans Medical and Surgical Journal, Vol. 93, No. 12, June, 1941, page 645.

In addition, New Jersey has a "Society for the Relief of Widows and Orphans of Medical Men in New Jersey" which issues an annual report. New York has a "Physician's Home Incorporated." There is also a New York Physicians Medical Aid Association with an office at the Academy of Medicine, 2 East 103rd Street, New York City. Iowa has a "Committee on Superannuated Physicians," a report of which was published in the Journal of the Iowa State Medical Society, July, 1934, pages 391-392. The Philadelphia County Medical Society has an "Aid Association." In California, the Los Angeles County Physicians Aid Society seems to work in cooperation with organized medicine. Illinois has a state medical society committee on medical benevolence. The following from the bulletin of Summit County, Ohio, Medical Society, February, 1937, gives a summary of various activities in this field.

"In 1934 the Alabama State Medical Association appointed a committee to prepare a benefit plan, the fund to be accumulated from yearly payments by the members. The Louisiana Society has a small fund derived from the surplus of the entertainment fund each year. Maryland has a fund for the care of widows and orphans of physicians, but does not aid indigent doctors. The Massachusetts Medical Benefit Fund has a program for

caring for needy physicians and their families. It is independent of but apparently has the approval of the State Society. Since 1932, the New Hampshire Society has reserved 50 cents from each member's dues for a benevolent fund. The Woman's Auxiliary of the New Jersey Society has a fund of \$130,000.00 for physicians and their families. The Philadelphia County Society distributes funds through its Benevolence Committee. In 1934 it paid \$5,014.58. The Medical Benevolence Fund of Pittsburg allots a sum not to exceed \$1.00 from each member's dues. The principal is \$100,000.00 and \$9,135.00 was distributed in 1936. The West Virginia Association puts \$1.00 from each member's dues into its 'Indigent fund.'

"Austria, Denmark, France, Germany, Great Britain, Holland, Hungary, Norway, Poland, Switzerland, have various forms of aid for indigent physicians. Mutual insurance societies operate in Austria, Czecho-Slovakia, Denmark, France, Germany, Great Britain, Hungary, Luxembourg, Norway, Palestine, Sweden, Switzerland."

At the present time we have no definite plan to suggest.

The plan used in some of the states calling for assessments would necessitate a change in the constitution and by-laws, and this as you know would have to be voted on by the House of Delegates.

1. Other suggestions would be a mutual insurance plan of some kind.

2. An endowment plan which might be set up from money voted from the treasury of the state Society.

It is the opinion of your committee that a further study should be made before a definite plan is presented for final action.

By motion (Barlow-Cannon) the Society authorized an invitation to the American Psychiatric Association to hold its 1943 session in Hot Springs National Park.

By motion (Fletcher-Cannon) it was ordered that reports of committees be summarized for presentation to the House of Delegates and be limited to ten minutes in presentation.

By motion (Fletcher-Cannon) committees were requested to prepare their reports for publication in The Journal prior to the annual session.

By motion (White-Thompson) the House of Delegates recommends to the State Medical Board of the Arkansas Medical Society that the names of physicians in the military service be published in the annual list of licentiates of the board under a heading "Military Service," and that they not be listed as "suspended."

Prior to adoption the motion was discussed by Barlow, Thompson, Shuffield and White.

By motion (H. T. Smith-Kolb) the Society formally indorsed the work of and commended the National Physician's Committee for the Extension of Medical Service.

By motion (Evans-Wootton) the following were elected honorary members of the Society:

E. H. Abington, Beebe.
C. Arkebauer, Little Rock.
J. J. Baker, Magnolia.

S. S. Beaty, England.
B. L. Bennett, Van Buren.
Robert Caldwell, Little Rock.
R. F. Darnall, Little Rock.
J. C. Davis, Little Rock.
J. R. Dibrell, Little Rock.
W. D. Freeman, Mount Ida.
C. G. Hinkle, Batesville.
N. R. Hosey, Joiner.
J. F. John, Eureka Springs.
N. J. Latimer, Corning.
Vernon MacCammon, Arkansas City.
J. M. Matthews, Morrilton.
J. A. Robinson, Summers.
R. L. Saxon, Little Rock.
A. L. Spain, Letona.

By motion (White-Evans) E. H. McCray, Malvern and M. Y. Pope, Monticello, were nominated for election to affiliate fellowship in the American Medical Association.

By motion (Rush-Shuffield) the following resolution presented by S. W. Douglas was adopted.

COOPERATION NEEDED TO MAINTAIN HEALTH STANDARDS

Physicians of America have always met emergencies with willingness and skill. We wish to commend the bravery of Dr. Wassell in the battle of Java. His brilliant action is well worthy of emulation.

In peace or in war, American physicians have never failed in their duty. We have the most healthful nation on earth and the most efficient and resourceful army on the combat front of today. The boys who are fighting for our liberty must have the most efficient medical service. Many of our best doctors are now in the army.

We ask that the people of Arkansas cooperate with their physicians, with the State Board of Health, and with other health authorities in maintaining a high standard of health on the home front.

Like it or not, so far in this conflict, we are being whipped. Born of a determination to win, a new combat spirit is now leading us to ultimate victory.

The Arkansas Medical Society pledges its time and its skill in maintaining the highest degree of health and efficiency on both the home and the combat fronts.

By motion (Barlow-G. W. Reagan) the House of Delegates adjourned.

FINAL GENERAL SESSION APRIL 29, 1942

Following adjournment of the Final Session of the House of Delegates, the General Session was called to order by President Jones.

The following Past-Presidents came forward and were seated on the rostrum: E. E. Barlow, A. S. Buchanan, Geo. B. Fletcher, W. H. Mock, M. L. Norwood, H. T. Smith, S. J. Wolfermann and W. T. Wootton.

S. J. Wolfermann and W. T. Wootton escorted R. B. Robins to the rostrum where he received the gavel from H. Fay H. Jones, who

said: "Bob, the boys are behind you 100%." President Robins accepted the office of President, speaking as follows: (See President's Page).

E. E. Barlow and Geo B. Fletcher escorted President-Elect S. J. Allbright to the rostrum. Dr. Allbright said that he would not attempt to make a speech as he could not tell how happy he was and promised to do his best for the Society.

Jos. F. Shuffield extended the invitation of the Pulaski County Medical Society to hold the 1943 annual session in Little Rock.

By motion (Cannon-Kolb) the invitation was accepted.

The Society then adjourned sine die.

REGISTRATION—1942 ANNUAL SESSION

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Members—300. Visitors—46. Exhibitors—32. Total registration—378.

RANDOM THOUGHTS OF THE SECRETARY

April 22nd. The lone civilian present, we see the staff conferences at Station Hospital, Camp Chaffee, off to a good start. The army officers exhibit a most commendable interest in scientific medicine and we predict benefit to local medicine in our association with this group.

April 25th. Goldstein sponsors Greenblatt for a joint staff meeting with the army much in evidence. Among the uniforms is Schirmer who has changed location and title but continues with the same work. Greenblatt advises X-ray therapy in venereal disease, which is the last straw for many of our confreres. To Goldstein's for the afterglow, an occasion for good food and much merriment.

April 26th. Enroute on U. S. 270 now in final process of becoming a good highway since most cars are going into the garage for the duration. To the Arlington where that genial Scotchman, Chester, greets us and we are

certain that all is in order for the 67th annual session. Thence to the Woottons, who with the Smiths, play the part of festive hosts with even more success than attended this pre-convention gathering in 1939.

April 27th. The annual session gets under way and "procurement" promptly takes the stage away from Farm Security as the most-discussed topic. Calcote and Krock appear in navy blues, looking the part of stalwart sailors, Calcote bringing along some of that Corpus Christi heckling with which to banter us. For about the first time, the women "take" the Council. Buchanan invites the Council to his country retreat with much promise, but is topped at the afternoon session, where Mayor McLaughlin and Harry Murry extol their home towns. With an array of talent the public meeting is well received. Later to the Southern Grill where we converse with Dungan as he takes his tea. The day passing in review we pause to contemplate that today's registration under the Selective Service has made many an "over-age destroyer" available.

April 28th. The day given over to scientific sessions, we have a bit of leisure to enjoy the fellowship of the meeting and can pat King Wade on the back for assembling, after much effort, a worth-while program. The annual banquet session is another joyful affair with the gallery insisting that Margaret Robins make Bob's speech and there are many who still feel that the gallery was right. To us comes the unique distinction of being permitted to rise, say nothing and sit down, no doubt, the remembered part of the banquet to a lot of well-wishing friends in the audience.

April 29th. Early to breakfast, having escorted the past-presidents to their meeting, we observe J. H. McCurry greet a lady "relative" in the dining room of the Arlington, which she does with fine touch. Berry Moore, as has become a habit, presides for the last scientific paper as Delmas Kitchens "comes home" in truly great style as guest speaker.

Today marks, we believe, the last time during this meeting when one of the councilors will approach and ask that we make good that five dollars the wife has just borrowed. We believe she borrowed from seven of the ten.

The final sessions over and never have we seen a happier President-Elect than Sam Albright, we join the post-mortems at Sullivans' and Fletchers' and find meat loaf in hot biscuit as prepared by Vera a new delicacy.

April 30th. Back in routine again astonished to read that Noel Copp is replacing his car with a horse. Now, we want to hear the story of a midnight ride to Knob Creek.

May 4th. To lighten the life of a procurement chairman come Buckalew and Nesbitt in person and letters from J. G. Martindale, Paul Z. Browne and T. N. Black, all ready to accept commissions in the army medical corps without further ado.

May 7th. Aboard the Southern Belle crossing the states of Oklahoma, Arkansas, Kansas and Missouri, taking advantage of the opportunity to do the chore of writing the proceedings of the 67th annual session and putting in a good five hours on this job. Arriving Kansas City late but able to climb into the Pullman ahead of departure and to sleep into Omaha.

May 8th. Meeting jointly with the newly-formed recruiting boards of the army which seek to speed appointment of physicians as medical officers, and it looks as if

they really accelerated the process. Feeling as much out of place with all these uniforms as a salesman at a post exchange, we civilians being most definitely in the minority. To the conference come Cohenour from Albuquerque, Henry Turner from Oklahoma City, Larsen from North Dakota and Phillips from Cheyenne and many another with questions to be answered.

May 10th. Goldstein voices a complaint on the advertising columns of The Journal which we take in good grace, much preferring that the membership make complaints than that they take the advertisements with indifference.

May 12th. Calling professionally with Guy Hodges in the town of Garfield which lies almost in Missouri, one of our longest calls to date. Thence back to Rogers where we call Building and Loan Director, Clyde McNeil, out of a director's meeting to discuss the Farm Security Administration, a subject more to Clyde's liking as many know.

May 13th. With a neat diagnosis of intussusception, Captain Branch proves that an army medical officer may continue to be a good clinician.

May 19th. Meeting Clyde McNeil at Alma this morning, we park his car there and ride in ours to Clarksville where it occurs to us that Earle Hunt might furnish tires for the trip to Little Rock, which he does in a grumbling fashion, but more amply supplies us with a lunch which has all the trimmings we would expect Earle to have on the table, our presence somewhat disconcerting to the Hunt daughters who are forced to eat up town. At Little Rock, joined by President Robins and Joe Shuffield and away to McGehee, finding that previous conceptions of trailer parks and crowded communities fade in comparison with what Pine Bluff has in its lap. The Fourth district really turns out for a banner meeting with legislation and procurement are discussed after Bob Robins hastens through with a scientific presentation. Departing about eleven, the return trip enlivened with much conversation, Bob and Joe drop out at Little Rock, Bob to go to the dental meeting, Joe to less hilarity, and Earle pilots a sleeping pair to Clarksville, where we are forced to wake and transport the still sleeping Council Chairman to our home, getting to bed at five, Clyde mumbling something about "an imposition."

May 21st. The guest of Harry Savery, no mean heckler we find, we discuss emergency medical care of civilians for the Van Buren Rotary club and are able to report that the Crawford County Medical Society is "working" on the problem.

May 26th. What with multitudinous correspondence and many telephone calls over the activities of the procurement and assignment agency, it comes most pleasing this evening to hold phone conversation with Major Stanley M. Gates, late of Fort Bliss and Camp Lewis, now a new arrival at Station Hospital, Camp Chaffee. In manner typical, he proceeds to become a patient right away thus acquiring an insight into the foibles and intricacies of his new station without incurring liability for error.

WOMAN'S AUXILIARY PAGE

MRS. RALPH CROSS, Publicity Secretary, Texarkana

The Woman's Auxiliary to the Arkansas Medical Society opened its eighteenth annual meeting in Hot Springs, April 27, 1942, for a three-day session.

An Executive Board Meeting was held on the morning of the 27th, followed by an Executive Board luncheon in the Fountain Room of Hotel Arlington. The general session began at 2 P. M., the meeting being called to order by Mrs. E. L. Thompson, president of the Auxiliary to the Garland County Medical Society. Invocation was given by Mrs. H. King Wade. The address of welcome was given beautifully by Mrs. George B. Fletcher of Hot Springs. The response to the address of welcome was given by a past-president, Mrs. C. E. Kitchens, of DeQueen. Mrs. Calvin Churchill, state president, was introduced by Mrs. E. L. Thompson, Hot Springs. Following the introduction of special guests, a splendid informal talk was given by Mrs. J. U. Reaves, of Mobile, Alabama, who is the president of the Auxiliary to the Southern Medical Association. Following Mrs. Reaves' talk, reports were read by the state officers and committee chairmen. Mrs. R. H. Whitehead, of DeWitt, reported on the meeting of the American Medical Association in Cleveland, June 2-6, 1941. Mrs. W. R. Brooksher, Council Woman to the Southern, gave a report of the Southern Medical Association meeting held in St. Louis in November, 1941.

The Auxiliary members met with the doctors at the open meeting on Monday night, April 27, and splendid talks were given by Mrs. J. U. Reaves, Colonel Beck and Governor Adkins.

The memorial service was held at the First Presbyterian Church on Tuesday morning, at 8:30 o'clock. Names of the deceased members were read, and a splendid tribute was delivered by Dr. W. H. Mock, of Prairie Grove.

The general session on Tuesday, April 28, was called to order by the president, Mrs. Calvin Churchill, at 9:30 A. M. Mrs. C. W. Garrison gave the invocation. Dr. H. Fay H. Jones, president of the Arkansas Medical Society, presented an inspiring address to the assembly. This was followed by the reports from the District and County Auxiliaries. The following officers for 1942-43 were elected:

President—Mrs. L. G. Fincher, El Dorado.
 President-Elect—Mrs. L. J. Kosminsky, Texarkana.
 First Vice President—Mrs. Euclid Smith, Hot Springs.
 Second Vice President—Mrs. H. T. Smith, McGehee.
 Third Vice President—Mrs. L. F. Barrier, Little Rock.
 Fourth Vice President—Mrs. J. K. Walker, Pine Bluff.
 Treasurer—Mrs. Sam Thompson, Camden.
 Parliamentarian—Mrs. Fount Richardson, Fayetteville.
 Historian—Mrs. C. W. Garrison, Little Rock.
 Publicity Secretary—Mrs. M. E. Foster, Ft. Smith.

The Auxiliary voted to create the office of Poet Laureate to the Auxiliary to the Arkansas Medical Society, and elected Mrs. George B. Fletcher, of Hot Springs, to serve for the year 1942-43.

A luncheon was held in the Fountain Room, Hotel Arlington, with Mrs. E. L. Thompson serving as toast mistress. The invocation was given by Mrs. C. H. Lutterloh of Hot Springs. Mrs. Calvin Churchill, president, gave her annual report. Mrs. William Hibbitts, national program chairman, gave an interesting talk, this being followed by

a few reports carried over from the general session. Mrs. C. W. Garrison installed the new officers, and Mrs. Churchill gave a short farewell address and presented the gavel to the new president, Mrs. L. G. Fincher, who delivered a beautiful address, concluding with Mary Stuart's club collect. Mrs. Fincher presided over the post-convention board meeting immediately following the luncheon.

Mrs. J. L. Kellum was installed as president of the Sebastian County Medical Society Auxiliary May 11th at a luncheon which marked the close of the Auxiliary year, with meetings suspended until October. The slate of the nominating committee for new officers was accepted unanimously. The nominating committee included Mrs. Everett Moulton, Mrs. W. R. Brooksher, Jr., and Mrs. J. S. Southard.

Mrs. Kellum, president, succeeds Mrs. Charles T. Chamberlain, who becomes vice president; Mrs. I. Fulton Jones succeeds Mrs. B. L. Ware, secretary; Mrs. B. B. Bruce succeeds Mrs. J. L. Kellum, treasurer.

Mrs. Chamberlain presided at the luncheon program and installation, and expressed appreciation for the co-operation of the officers and committees serving with her. Mrs. W. F. Rose, who completed her eleventh successive year as publicity chairman, announced activities of the Auxiliary for the year.

Mrs. S. P. Stubbs and Mrs. J. L. Kellum were luncheon hostesses. Other members present were Mrs. Charles T. Chamberlain, Mrs. M. E. Foster, Mrs. A. A. Blair, Mrs. W. R. Brooksher, Jr., Mrs. D. W. Goldstein, Mrs. James Elkins, Mrs. Walter Eberle, Mrs. I. F. Jones, Mrs. Everett Moulton, Mrs. S. J. Wolfermann, Mrs. J. S. Southard, Mrs. W. F. Rose, Fort Smith; Mrs. B. B. Bruce, Alma, and Mrs. B. L. Ware and Mrs. C. W. Hall, Greenwood.

Mrs. W. F. Rose, Publicity Chairman
of the Auxiliary of the Sebastian
County Medical Society.

BOOK REVIEWS

Communicable Disease Nursing. By Theresa I. Lynch, R. N. Instructor in Education, New York University, etc. Pp. 678. 156 illustrations. 5 color plates. Price \$3.75. Saint Louis: C. V. Mosby Company, 1941.

This volume is of value to the individual nurse, emphasizing the part she may play in the prevention and control of communicable disease as well as presenting the subject for teaching purposes.

Diseases of Metabolism: Edited by Garfield G. Duncan, M. D., Chief of Medical Service "B," Pennsylvania Hospital; Associate Professor of Medicine, Jefferson Medical College; Philadelphia, Pennsylvania. 985 pages with 158 illustrations including 7 plates in color. Philadelphia and London: W. B. Saunders Company, 1942. Price \$12.00.

This is an authoritative work presenting recent knowledge in field of metabolic diseases with additional discussion to permit the physician to properly evaluate the data in clinical terms.

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No. 2

PRURITIS ANI *

RALPH E. CRIGLER, M. D.
Fort Smith

One thing about pruritis ani on which we all agree is that it is an itching condition involving the anal region, quite persistent, and more severe at night. Even our patients will agree to this fact. Pruritis ani is a symptom and not a disease. There is no one specific cause; nor is there any one specific treatment. Much has been written about this subject during the past few years which has certainly been a help to those interested in its study and treatment. Some of the first suggested therapeutic measures nearly a century ago are equally as confusing as some of our modern therapy. William Allingham, the famous British surgeon at St. Marks, offered what he claimed was sure relief for the itching. It was to insert a bone plug into the rectum at bedtime. The bone should be about the size of the forefinger and one and a half inches long. Allingham's explanation of the excellent results obtained from such treatment was supposed to be due to pressure upon the nerve filaments which thus stopped the itching.

We are all familiar with Sir Charles B. Ball's (1851-1916) original operative method. This consisted of making long incisions around the anal area and dissecting flaps of skin on each side to free the nerve endings. This operation has been modified and simplified to the present under-cutting operation without dissecting the skin flaps, and subsequently is not such a crippling type of procedure. The fact remains that even yet there fails to be any operation that can be relied upon as a sure cure.

Anyone who has had any experience with pruritis ani is familiar with the varied and gruesome histories obtained from such patients. It really must be a horrible sensation when these people resort to hair brushes, scrubbing brushes

or bath towels drawn vigorously back and forth over the affected part. Finger nails are usually most convenient and cause extensive excoriation of the perianal skin with secondary infection is the result. This method of relief accounts for transplantation of fungus infections such as "athlete's foot," which once implanted, certainly makes a chronic stubborn condition.

In a series of 500 of our cases of pruritis ani the symptoms elicited were as follows:

Itching about the rectum	500
Bleeding	174
Backache	151
Sensation of rectal fullness and pressure	126
Constipation	114
Aching sensation in one or both hips	32
Extreme nervousness	31
Foul smelling mucous	16
Diarrhea	14
Aching sensation tip of spine	11
Asthma	3
Fecal incontinence	3

It is readily noticed that bleeding was second in frequency of complaint. One is more or less surprised that it is not more prevalent due to the extensive ulceration and infection. The backache is third and is accounted for by referred reflex action.

Examination reveals the typical picture from the mild irritation type aggravated by scratching to the extensive, fissured, leathery folds of perianal skin.

Since pruritis ani is a symptom and not a disease entity, and may be associated with almost any disease of mankind, we will not attempt to elucidate. It seems more appropriate to list the conditions we found upon examination of these 500 cases and let you draw your own conclusions as to the etiology.

The following is a tabulated list of positive findings in the order of their prevalence:

Hemorrhoids	272	G. C. Urethritis	4
Cryptitis	192	G. C. Vaginitis	4
Fistula	99	Atonic Colon	4
Spastic Colon	81	Diverticulosis	4
Papillitis	66	Alcoholism	4

* Read before the Sixty-seventh Annual Session, Arkansas Medical Society, Hot Springs National Park, April 28, 1942.

Fissure	59	Rectocele	3
Spastic Anus	58	Atonic Anus	3
Proctitis	29	Tuberculosis	3
Abscess	22	Procidentia Recti	3
Polyps	22	Chiggers	3
Syphilis	21	Cholithiasis	3
Trichomonas	17	Lymphogranuloma	3
Anal Scar Tissue	14	Senile Vaginitis	2
Prostatitis	13	Cystocele	2
Epidermophytosis	13	Avitaminosis	2
G. C. Proctitis	11	Bartholin Gland Cyst	1
Carcinoma	9	Inguinal Adenitis	1
Anemia	9	Fecal Impaction	1
Ulcerative Colitis	9	Impetigo	1
Rectal Stricture	8	Arthritis	1
Pin Worms	7	3* Dermoid Cyst	1
Diabetes	7	Nephritis	1
1* Melanosis Coli	7	4* Neuroma	1
2* Allergy	6	Furunculosis	1
Leukoplakia	5	Epilepsy	1
Warts	5	Scabies	1
Pilonidal Sinus	5		

1* Melanosis Coli as referred to here concerns the mucosal chocolate pigmentation of the rectum and colon with edematous changes due to taking of cascara containing laxatives.

2* These six cases of allergy were due to chocolate, bromides, eggs and milk.

3* This dermoid cyst was located between the sacrococcygeal spine and rectum.

4* This neuroma involved the body of the fourth sacral vertebrae, had eroded through the entire body of same and was palpable through the rectum, but extrinsic to the rectum.

Treatment

As mentioned before, there is no specific cause for pruritis ani and, therefore, there is no specific treatment. A complete, carefully taken history may make your diagnosis and give you the correct procedure to relieve the patient.

Referring to this series it is evident that infection is a significant causative factor. A routine blood Wassermann and urinalysis should be made. A biopsy should be taken from any tumor mass encountered, whether in the anal canal, rectum or lower sigmoid colon. The examination is not complete until a sigmoidoscopic examination is made, and oftentimes an X-ray of the colon by barium enema, followed with air insufflation after expulsion of the barium.

After the examination and laboratory work is completed, the patient should be informed as to the pathological findings. Then the patient should be advised to have same operated or treated, as the case may be. After all this has been completed, we should always have one thing definitely understood with the patient, that there is a possibility of some other factor being the cause of the itching. However, if the hemorrhoids, cryptitis, papillitis, benign tumors,

fissures, fistulae, proctitis, abscesses and infected sinuses are eradicated 80% or more of your pruritis cases will be cured.

Your history is not complete unless you have inquired about "athlete's foot." The majority of fungus infections encountered about the anal region are secondary to a chronic case of "athlete's foot." We all know that moisture enhances the growth and severity of fungus infection. Due to this fact the perianal tissues should be kept dry. A wash of 1:3000 mercuric chloride, allowed to dry and followed by dusting powdered calomel is helpful. When there is excessive moisture the patient should be instructed to keep a small piece of absorbent cotton between the buttocks. The various salicylic and benzoic acid fungicide preparations are of value. Tincture of metaphen applied once or twice daily or gentian violet in a 2-4% solution has proven beneficial. Basic fuchsin in a 2-4% solution has gradually gained popularity. It seems this dye penetrates the epidermal layer of the skin to a greater extent than any of the other aniline dyes leaving a stain of 8-10 days duration. In this way basic fuchsin simulates the mercuric sulfide tattoo method with which we have had no experience. If the patient has "athlete's foot," it is just as important to treat that as it is to treat the pruritis ani. Repeated suberythema doses of X-ray given at weekly intervals has proven to be a great adjunct in the treatment.

Any chronic infection should be corrected whether it be pyorrhea or pyelitis. If the patient is anemic this should also be corrected, and restorative measures to improve the patient's general health should not be overlooked.

We must not overlook the fact that intestinal parasites may be the chief offender. The most common of these is oxyuris vermicularis, better known as pin worms. There are several anthelmintic preparations on the market but we prefer the carbon tetrachloride preparations. In women, especially, gonorrheal proctitis is not rare, neither is trichomonas, either of which may result in a severe pruritis. In the extreme undernourished patient we must consider avitaminosis. There were two cases of extreme pruritis in this series of 500 due entirely to vitamin deficiency.

If the cause is allergy, and you suspect it, you will be lucky to find the specific food or element in three to six months. I recall one patient who was sensitive to chocolate but skin tests were entirely negative. Yet, following the ingestion of

a small amount of hot chocolate this patient would experience severe pruritis ani in 8 to 12 hours. This was accidentally found. So in order to prove the diagnosis the patient later was told to partake of a small amount of chocolate which again resulted in severe excoriation and cracking of the perianal skin.

We should remember that there is a cause for the itching. Is it due to infection and the resultant irritating secretions? If so, which bacterium is responsible? Is it some form of allergy or contact dermatitis or just some simple common skin disease, such as impetigo, epidermophytosis, or is it alcoholism? It may be worms, chiggers, scabies or body lice; traumatic irritation due to tumor masses, hemorrhoids, warts, condylomata, scar tissue or skin tags as a result of a pre-existing cryptitis.

In conclusion, we would like to re-emphasize the fact that pruritis ani is a symptom and not a disease; its causes are many and require the patience of a saint to work out the solution. Just remember your patient has pruritis ani. If you find the cause and eradicate it, you can cure him.

INTOLERANCE TO DIETHYLSTILBESTROL

Nausea and vomiting have been the most frequent side-effects following administration of Stilbestrol (diethylstilbestrol). A recent report (J.A.M.A., 119:400, May 30, 1942) points out that there is a definite relation between these symptoms and the nausea and vomiting of early pregnancy. If one will merely take the time to ask the prospective patient if she had nausea and vomiting with a previous pregnancy, it would serve as a warning to give not over 0.25 mg. daily as an initial dose. Desensitization may be accomplished by giving 0.1 mg. tablets once daily for five days, then increasing the dose gradually until the therapeutic level is reached. Diethylstilbestrol, Lilly (formerly known as Stilbestrol) is available in 0.1 mg. tablets, as well as in larger doses, for oral administration.

SUMMER DIARRHEA IN BABIES

Casac (calcium caseinate), which is almost wholly a combination of protein and calcium, offers a quickly effective method of treating all types of diarrhea, both in bottle-fed and breast-fed infants. For the former, the carbohydrate is temporarily omitted from the 24-hour formula and replaced with 8 level tablespoonfuls of Casac. Within a day or two the diarrhea will usually be arrested, and carbohydrate in the form of Dextri-Maltose may safely be added to the formula and the Casac gradually eliminated. Three to six teaspoonfuls of a thin paste of Casac and water, given before each nursing, is well indicated for loose stools in breast-fed babies.

Please send for samples to Mead Johnson & Company, Evansville, Indiana.

METHODS OF GIVING THE SULFONAMIDES * †

ALBERT M. HARRIS, M. D.

During the last few years the sulfonamides as chemo-therapeutic agents have been assuming increasing importance. Probably every practicing physician is using them with satisfactory results in a fairly wide variety of conditions. In certain diseases, they are quite definitely indicated.

The usual method of giving these drugs, is by the oral route. There are, however, a few cases where the patient is unable to take them in this manner. Occasionally the symptoms of nausea and vomiting become severe, or a Wangensteen apparatus may be desirable. In these instances, it may become necessary to choose another route of administration.

Usually, in the past, the method of choice has been the intravenous. This method, however, has several disadvantages. Among these may be listed the following:

First: Intravenous therapy of this type practically requires hospitalization.

Second: The fluids are rather caustic to the veins and frequently result in sclerosis of those vessels. This diminishes the available veins for intravenous therapy.

Third: When administered by this route the sulfonamides have a relatively short period of activity. If the blood level of these drugs be taken as indicative of therapeutic activity it has been found to fall quite low within about two hours. Accordingly to maintain a satisfactory blood level it would be necessary to have almost a continuous drip apparatus. In other words, while the intravenous method may be a very satisfactory way of instituting treatment, it is not applicable by the average general practitioner to continuous therapy.

As an alternate route for administration of the sulfonamides the intramuscular was tried by the British and later used in Canada and in this country. It has now had sufficient trial to have established itself as effective for use by most doctors.

For this purpose the sodium salt of the appropriate sulfonamide is used (sulfapyradine, sulfathiazole or sulfadiazine may be given in this way). A thirty-three and one-third per cent (33 1/3%) solution in sterile distilled water is

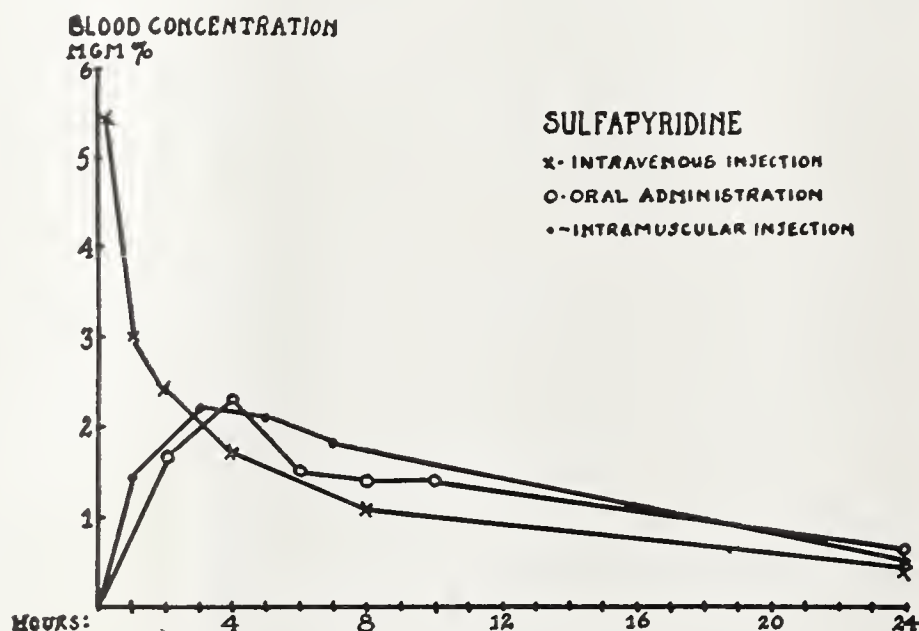
* Research Paper No. 530, Journal Series, University of Arkansas. The experimental basis for this paper is taken from work by Lynn Hall, Edward Thompson, Raymond Wyrens, Violet Wilder, and Albert Harris, published elsewhere.

† From the Department of Pathology, University of Arkansas School of Medicine.

prepared. This concentration is close to the saturation point for these salts, especially sulfathiazole, and the drugs will go into solution more rapidly if the distilled water is warm. The injection is made with a 10 cc. syringe and a long intramuscular needle. Considerable care must be exercised to get the drug into the muscle as it will cause a slough if injected into the subcutaneous tissues. The gluteal muscles are the ones usually used. However, the injection may

It should be mentioned that the oral method gives by far the most variable results. In the other two the curves of the individual cases are quite similar. It will be noted that the intramuscular injection gives a more sustained blood level than either of the other two. As a consequence less of the drug has to be used when it is given intramuscularly.

The advantages of the intramuscular method of administration may be listed as follows:



be given beneath the fascia lata. The most generally accepted initial dose is 2 grams or 6 cc. of the prepared solution. This is followed by injections of 1 gram or 3 cc. of the solution at appropriate intervals. The sulfonamides are effective over a much longer period when injected into the muscle. Consequently, the usual practice is to make the injections at 6-8 or 10 hour intervals depending on the total dosage desired. For example, if it is decided that a patient should receive 3 grams a day an injection of 1 gram would be given every 8 hours. In actual practice it was found that after about 24 hours, the blood level of the drug is stabilized and remains almost the same provided the interval between injections is not too great.

The accompanying graph gives a fairly satisfactory idea of the relative blood levels obtained by the various methods of administration.

First: The method is adaptable for use in the home. The only equipment necessary is a 10 cc. syringe and a long needle.

Second: A relatively high and a long sustained blood level is attained.

Third: Somewhat smaller doses will give the same results.

Fourth: The only important precaution is to be sure to get the drug into the muscle.

Summary: A comparative study of the various methods of administering the sulfonamides is presented with particular emphasis on the intramuscular.

A graph is presented of the blood level curves of the sulfonamides following single doses of the drugs when given orally, intravenously and intramuscularly (Fig. 1).

HISTORY OF THE LINCOLN COUNTY MEDICAL SOCIETY 1896-1942

Compiled from the Original Minute Book

MRS. CHAS. W. DIXON

Gould

1896—Although from the early days medical men of splendid education practiced their profession in the section of the state now known as Lincoln county, there is no record or reference of the formation of a Medical Society until 1896, when the organization meeting was held at Star City, the county seat, on May 7th. Lincoln county was formed in 1876.

Five physicians were present—W. M. Bittinger, Grady, University of Iowa Medical Department, 1882; A. S. J. Collins, Tyro, Memphis Hospital College, 1896; J. K. McClain, Star City, Louisville Medical College, 1878; B. F. Tarver, Star City, University of Louisville Medical Department, 1891; J. A. White, Star City, Vanderbilt University, Nashville, 1886. Dr. W. M. Bittinger served as President Pro-Tem, and Dr. J. A. White, Secretary.

Drs. Tarver, Collins, and McClain were appointed to serve as a committee to prepare the By-Laws and Constitutions for the Society. Dr. Tarver volunteered to contribute an article on Medical Science for the next meeting.

October 7—Star City. Officers elected: President, W. M. Bittinger; Secretary, J. A. White.

Dr. Tarver read the committee's report on the proposed By-Laws and Constitution, which was adopted. It is interesting: "The Object of the Society: The advancement of medical knowledge; elevation of its professional character; to protect the interest of its members; the upholding of its standard, and to uphold all measures adopted to be of benefit to both physician and patient." "Requirements for membership: Its members shall be graduates of a reputable medical school, of good moral character, and shall make for the promotion of the profession to which they belong." "The Code of Ethics of the American Medical Association shall be the discipline of the Society." The By-Laws and Constitution were recorded in the Minute Book, and printed copies sent to each doctor in the county.

Dr. Tarver read a paper on Malarial Hematuria.

Thus was formed the Lincoln County Medical Society. To Dr. B. F. Tarver goes the major part

of the credit for the organization, and to him goes the credit for keeping it alive for many years.

1897—April 7—Varner. Three new members were added: W. C. Kimbro, Tyro, St. Louis College of Physicians and Surgeons, 1884; J. G. Worley, Varner, Tulane, 1887; C. C. Price, Douglas, University College of Medicine, Richmond, Va., 1896. Delegates to state meeting: Drs. Price and White.

July 7—Star City. New member: J. A. Stewart, Cornerville, Medical Department, University of Louisiana, 1878. Dr. Kimbro read a paper on "A Few Thoughts on Acute Dysentery."

October 6—Election of Officers. President, W. C. Kimbro; Secretary, A. S. J. Collins.

1898—April 6—Star City. Delegates to state meeting in Eureka Springs: W. M. Bittinger and W. C. Kimbro.

1899—April 5—Tyro. Drs. Bittinger and Collins appointed as delegates to the state medical society meeting.

1901—May 9—Star City. Delegates elected to state medical society meeting: Drs. Bittinger and Price. President, W. C. Kimbro; Secretary and Treasurer, J. K. McClain.

1903—March 28—Varner. The Lincoln County Medical Society was reorganized by Dr. Vernon MacCammon, Councilor, of Arkansas City, who called a meeting of all the graduates in the county. Eight members enrolled. Among these were: John S. Jenkins, Douglas, University of Nashville, Tennessee, 1899, and O. G. Blackwell, Varner, Tulane University of New Orleans, 1901. Officers elected: President, W. M. Bittinger, Grady; Vice-President, J. A. Stewart, Cornerville; Secretary, B. F. Tarver, Star City; Treasurer, C. C. Price, Douglas. Censors: J. S. Jenkins, O. G. Blackwell, J. K. McClain. Non-graduates licensed to practice in county: 16 white, 1 negro. Dues were \$2.00 a year.

1904—Delegates to state meeting: Drs. McClain and Tarver.

1905—March 1—Star City. Election of Officers: President, W. M. Bittinger; Secretary, B. F. Tarver. Delegate to state meeting: W. M. Bittinger. State Board of Health bill discussed and approved, with Sections 11 and 12 amended. Members, 10; graduate non-members, 4; white licensed undergraduates ineligible for membership, 14; negro doctors, 3.

New members: C. Prickett, Tarry, University

of Arkansas Medical Department, 1904; J. T. Palmer, Star City, Tulane University, 1905; L. B. Richards, Varner, University of Memphis Hospital, 1898; J. F. John, Grady, University of Nashville, 1905. Deceased: J. A. Stewart, Cornerville, September 12, 1905.

1906—March 7—Star City. Election of Officers: President, J. K. McClain; Secretary-Treasurer, B. F. Tarver. Resolution adopted, that "All members of the Lincoln County Medical Society pledge themselves not to make examinations for any old line life insurance companies unless a minimum fee of \$5.00 is paid, and that all members stand by the resolution." Delegate to state meeting: B. F. Tarver.

1907—March 13—Star City. Election of Officers: President, J. K. McClain; Secretary-Treasurer, B. F. Tarver. Delegate to state meeting: J. T. Palmer. New member: Chas. W. Dixon, Douglas, University of Louisville Medical Department, 1904. Deceased: W. M. Bittinger, Grady.

1908—March 18—Star City. Election of Officers: President, J. F. John; Secretary-Treasurer, B. F. Tarver. Delegate to state meeting: C. C. Price. Resolution adopted that the delegate be instructed to vote against non-graduates being admitted as members of medical societies.

June 4—Tyro. "Two important cases reported."

1909—June 3—Star City. Election of Officers: President, W. C. Kimbro; Secretary-Treasurer, B. F. Tarver. Paper read by Dr. Kimbro on Malarial Hematuria. New member: A. Isom, Gould, St. Louis College of Physicians and Surgeons, 1906.

1910—March 10—Star City. Election of Officers: President, W. C. Kimbro; Secretary-Treasurer, B. F. Tarver. New members: F. L. Duckworth, Gould, Chattanooga Medical College, 1905; J. D. Watts, Tyro, Chattanooga College of Medicine, 1905. Reported seven white non-members and two negroes practicing in the county. Delegate to state meeting: F. L. Duckworth.

1911—March 3—Election of Officers: President, W. C. Kimbro; Secretary and Treasurer, B. F. Tarver. Delegate to state meeting: Chas. W. Dixon. New member: Thos. W. Raines, Mills, University of Arkansas, 1905. Nineteen non-graduates practicing in county. Resolution adopted to have the secretary write to the

Senator and Representative of this district asking them to support the bill for Public Health and Vital Statistics. Program: Hookworm Disease, C. C. Price.

1912—Feb. 14—New member: A. C. Thiolliere, Varner, University of Lyons, France, 1894. Dues raised to \$2.50.

1913—Jan. 14—Election of Officers: President, J. D. Watts; Secretary and Treasurer, B. F. Tarver. Delegate to state meeting: J. D. Watts. Secretary instructed to write to the county representative asking him to vote for the bill of Health and Vital Statistics.

Dec. 16—Star City. Election of Officers for 1914: President, J. D. Watts; Secretary and Treasurer, T. W. Raines. Delegate to state meeting: B. F. Tarver.

1914—Dec. 12—Star City. Election of Officers: President, J. D. Watts; Secretary and Treasurer, B. F. Tarver. Delegate to state meeting: J. D. Watts.

1915—Dec. 9—Star City. Election of Officers: President, A. C. Thiolliere; Secretary and Treasurer, Chas. W. Dixon. Delegate to state meeting for 1916: J. D. Watts. Twenty-two doctors, including 4 eclectics and 2 negroes, practicing in county.

1917—Feb. 6—Gould. Election of Officers: President, A. C. Thiolliere; Secretary and Treasurer, Chas. W. Dixon. New members: S. W. Colquitt, Cummins, University of Arkansas, 1912, and J. M. McClendon, Kentucky School of Medicine, 1883. Secretary instructed to again write to county representative and senator of the endorsement of bill prepared by State Board of Health; to solicit their support, and to notify Dr. C. W. Garrison of their action. President elected for 1917, A. C. Thiolliere; Secretary and Treasurer, Chas. W. Dixon. Delegate to state meeting: S. W. Colquitt. Censors were elected for three years.

April 3—Grady. New member: J. W. Clark, Furth, University of Nashville, 1906. Visitors: Wm. Breathwitt, Blankenship, and J. T. Palmer, Pine Bluff; Billingsley and Hutchinson, Grady. Dr. Breathwitt, eye, ear, nose and throat specialist, made a talk. Pellagra was discussed. Resolutions adopted that Lincoln County Medical Society adopt the resolutions of the Medical and Chirurgical Faculty of Maryland for the protection of any of its members who offer their services.

October 3—Furth. Resolutions adopted that the secretary write to each member of the Society, requesting him to make a canvass of all patients who are physically disabled, either from disease or accident, and report to secretary as early as possible; that the secretary send a tabulated form of this report to the Surgeon General of the War Department, Washington, as requested by that office in a letter dated September 20, 1917. Each member was requested to state his age and willingness to offer for military service if needed.

1917-1918—World War I—Serving in army abroad: A. C. Thiolliere, Varner; J. M. Clark, Furth; Volunteer Medical Service Corps: Chas. W. Dixon, Douglas; also, County Chairman War Savings Stamps, ranking second in state in procuring pledges. Present members who served in World War I and at home: A. C. Thiolliere and G. C. Wood. Influenza ravaged the country. Hard and hectic work for the doctors.

1919—March 21—Grady. Election of Officers: President, A. C. Thiolliere; Secretary and Treasurer, Chas. W. Dixon. Delegate to state meeting: A. C. Thiolliere.

1920—Feb. 2—Varner. Election of Officers: President, Chas. W. Dixon; Secretary and Treasurer, G. C. Wood. Delegate to state meeting: Chas. W. Dixon. New members: G. C. Wood, Grady, University of Arkansas, 1912; R. B. Corney, Cummins, Physicians and Surgeons College, Arkansas, 1911. Motion adopted that on March 1 every year each doctor report his delinquents to the secretary.

May 26—Star City. New member: M. H. Russell, undergraduate.

November 9—Grady. Resolution adopted to endorse sentiments of Pulaski County Medical Society to establish a single Board of Medical Examiners for the State of Arkansas.

1921—Dues all paid. No meeting.

1922—Jan. 11—Gould. President, Chas. W. Dixon; Secretary and Treasurer, B. F. Tarver.

1925—May 8—Gould. Election of Officers: President, J. M. McClendon; Secretary and Treasurer, S. W. Colquitt. Delegate to state meeting: Chas. W. Dixon. Dues, \$3.00. New member: Robert Hardin, Cummins, a transfer from Jefferson County Medical Society. Program: Round table discussion—Gall Stones and Cholecystotomy, with clinical cases shown; a case of uterine polypus reported and clinical material presented.

Dec. 4—New member: G. W. Ringgold, Gould, University of Arkansas, 1886. Discussion of ethical fees.

1926—Feb. 5—Gould. President, J. M. McClendon; Secretary and Treasurer, S. W. Colquitt. In reply to a letter from W. F. Smith, Chairman of Program Committee, Arkansas Medical Society, inviting Lincoln county to present a paper at the state meeting in Hot Springs. S. W. Colquitt was selected to give the paper.

April 9—Gould. Election of Officers. All re-elected.

1927—March 25—Gould. Deceased since last meeting: Dr. Robert Hardin, Cummins. Resolutions of condolence spread on the minutes and sent to Mrs. Hardin.

April 15—Election of Officers: President, J. M. McClendon; Secretary and Treasurer, Chas. W. Dixon. Delegate to state meeting in El Dorado: Chas. W. Dixon. Resolution adopted that home economics be taught in all schools in county. Dues, \$3.00.

July 23—Star City. Program: The Needs of the State University and Arkansas' Need of a General Hospital, Frank Vinsonhaler, Little Rock.

1929—March 22—Gould. Election of Officers: President, G. C. Wood; Secretary and Treasurer, G. W. Ringgold. Delegate to state meeting: G. C. Wood.

1930—March 4—Gould. Election of Officers: President, G. W. Ringgold; Secretary and Treasurer, A. C. Thiolliere. Delegate to state meeting: Chas. W. Dixon. Dues, \$5.00.

1931—April 10—Gould. Election of Officers: President, G. W. Ringgold; Secretary and Treasurer, A. C. Thiolliere. Delegate to state meeting: Chas. W. Dixon. Dues, \$3.00.

1932—March 15—Gould. Election of Officers: President, G. C. Wood; Secretary and Treasurer, Chas. W. Dixon. Delegate to state meeting: G. C. Wood.

1933—Feb. 2—Gould. Election of Officers: President, G. C. Wood; Secretary and Treasurer, Chas. W. Dixon. Delegate to state meeting: G. C. Wood. Death of R. B. Corney reported. New member: Vernon Tarver, Star City, University of Arkansas, 1926, a transfer from Union county, and a son of B. F. Tarver, one of the county society organizers, 1896.

Sept. 22—Gould. Charges made that P. A. Tyler, who had located in Gould, had been convicted of perjury, Pope County Circuit Court, and served sentence in Arkansas penitentiary, was therefore ineligible to practice medicine. The secretary was instructed to furnish all information obtainable to the State Medical Board of the Arkansas Medical Society. (This was done, and in due time Tyler's license was revoked.)

1934—Feb. 16—Gould. Election of Officers: President, Chas. W. Dixon; Secretary and Treasurer, Vernon Tarver. Delegate to state meeting: G. C. Wood. Communication from Director of Social Welfare for Federal Relief Administration that some doctors in the county were guilty of unfair practice. Resolution adopted that "the Lincoln County Medical Society stands ready at any time to cooperate with the Federal Relief Administration. The Society deplores the fact that some unfair methods **are said** to have been used in our county relief work, and never approves or countenances unfair methods." "Therefore, the Lincoln County Medical Society **shall** cooperate with the relief work in accordance with rules and regulations, and requests the welfare worker (Director of Social Welfare) to notify the Lincoln County Medical Society of any wrong action performed by any of its members in order for it to take appropriate measures to prevent, correct, or remedy, any unfair action at any time."

March 9—Gould. Resolution adopted to have Tuberculosis Clinic in Lincoln county for whites and negroes.

April 6—Grady. Visitors: Drs. Mahoney, Caldwell, Wallace and Parmley of Little Rock, and Dr. McMullen, Pine Bluff. Program: "Injuries and Diseases of the Eyes," by Dr. Caldwell; "Diphtheria," by Dr. Mahoney; "Electrical Burns and Shocks" and a demonstration of artificial respiration, Dr. Parmley. Delegate to state meeting: G. C. Wood. Chas. W. Dixon elected Councilor, 4th District, serving 1934-1938.

May 7—Star City. Anniversary meeting of the Lincoln County Medical Society, honoring Dr. B. F. Tarver, the only charter member remaining. Visitors: W. F. Smith, L. F. Barrier, W. B. Grayson, of Little Rock; J. S. Jenkins, O. G. Blackwell, A. A. Hughes, Virgil Payne, of Pine Bluff; J. S. Wilson, Monticello; C. K. Kimbro, Tillar; H. T. Smith, McGehee. Program: Hypertension, L. F. Barrier; Head Injuries followed by Epileptic Fits, W. F. Smith; Work of the State Health Department, W. B. Grayson.

Discussion of Federal Relief and Nurses. Adoption resolution for Pre-School Clinic.

June 8—Gould. Visitors: Drs. Jenkins, Lemons, McMullen, and Payne, of Pine Bluff. Case of Syphilis, presented by Chas. W. Dixon. Paper on Nerve Supply of the Upper Extremity, and the presentation of a case of gunshot wound of upper extremity, J. S. Jenkins. "The Development of Nasal and Accessory Sinus," Virgil Payne, and "Milk," E. C. McMullen. Musical program.

July 6—Grady. Visitors: Drs. Fulmer, Rhinehart, Calcote, of Little Rock. Program: Hypertension, S. C. Fulmer; Diet as a Body Need, B. A. Rhinehart.

August 3—Cornerville. Visitors: Drs. Lemons and Hughes, Pine Bluff; Wilson and Price, Monticello; Miss Mildred Waller, ERC Nurse, spoke on fees and her work with the physicians. Program: Treatment and Prevention of Malaria 40 Years Ago, J. M. Lemons; Acute Otitis Media, Dr. Hughes. Deceased: B. F. Tarver.

Sept. 7—Star City. Visitors: Drs. George Jackson, Carruthers, of Little Rock; A. S. J. Collins, Debolt, Wilson, and Price, Monticello; T. F. Collins, Star City. Program: Skin Lesions, Geo. F. Jackson; Fractures, Dr. Carruthers. Two cases of skin lesions examined by Dr. Jackson.

Oct. 5—Gould. Visitors: Drs. Wilson and Price, Monticello; S. W. Douglass, Eudora. New member: T. F. Collins, Star City, undergraduate. Program: Cancer, J. S. Wilson; Public Relationship, S. W. Douglass. Drs. Ringgold and Tarver appointed as ERA Advisory Board.

Nov. 2—Star City. Program: Malaria, Chas. W. Dixon.

Dec. 7—Gould. Election of Officers: President, Chas. W. Dixon; Secretary and Treasurer, Vernon Tarver. Delegate to state meeting: Chas. W. Dixon. New member: Z. H. McKinney, University of Nashville, 1910.

1935—Feb. 11—Star City. Resolutions adopted to notify Dr. A. S. Buchanan not to reinstate Dr. Tyler's license; also to notify Judge Parham and H. W. Smith not to allow him to practice in Lincoln county. Resolution adopted: "Send notifications to President of the United States, U. S. Senators and Congressmen, state senators and representatives, requesting them not to vote for any medical legislation unless approved by the American Medical Association and State Medical Society.

March 8—Star City. Visitors: W. T. Lowe, Pine Bluff; H. T. Smith, McGehee. Program:

Acute Abdomen and Appendicitis, W. T. Lowe; Health Insurance, H. T. Smith.

June 14—Grady. Program: Rheumatism, S. F. Hoge, Little Rock; Cancer, with slides, C. C. Reed, Jr., Little Rock.

July 25—Star City. Circular letter from Director of WPA of Lincoln county "to all Lincoln county physicians," relative to "physical examinations requested of relief clients before transfer to Works Progress Administration, to prevent assignments of clients to work for which they are mentally and physically unsuited or incapable of performing." Resolution adopted: "That this examination required is longer and more detailed than that required by standard insurance companies, for which they pay \$5.00; and is equal to examinations for U. S. Pensions; also, for examinations given for 'disability allowance' for which the government paid \$5.00. By this examination, on form WPA S-1, the physician is expected to safeguard the government against disability compensation claims by WPA employees, and the physician is entitled to a fee commensurate with the service rendered. We physicians of Lincoln county have examined applicants to date to enable them to proceed to work on approved projects, and thereby cause no delay, but in so doing have not accepted the fee offered. In the past we physicians, members of the Lincoln County Medical Society, have cooperated with the county relief agency in furnishing medical care for the needy at a greatly reduced fee, when all merchants, traders and individuals were paid full prices for their goods, and workmen were paid more than they have ever received for their labor since wartime; now we physicians are asked to protect the government against financial loss from workmen's compensation claims by making physical and mental examinations of clients before they are assigned to WPA projects at a fee of one-fifth the price paid by government and civil agencies for their services. This is an injustice done the medical profession. No other profession or trade has been asked to do so much for so little. Therefore, the Lincoln County Medical Society, in call meeting assembled this 25th day of July, 1935, has decided that our charges shall be \$5.00 for each examination made, unless a different fee is advised by the Special Committee on Medical Relief Activities of the Arkansas Medical Society."

Sept. 30—Grady. Guest speakers: George Lewis, Little Rock, and J. P. Price, Monticello.

Dec. 13—Gould. Election of Officers: Presi-

dent, R. J. Johnson; Secretary and Treasurer, Vernon Tarver. Delegate to state meeting: Vernon Tarver. Resolution adopted that the members of the Lincoln County Medical Society also join the Southeast Arkansas Medical Society.

1936—July 1—Grady. Resolution adopted to send a letter to State Health Officer, requesting that County Health Nurses not be permitted to administer typhoid or other vaccines to those amply able to pay for same, and suggests that persons receiving such services be required to sign statement of inability to pay.

Dec. 11—Star City. Election of Officers: President, R. L. Johnson; Secretary and Treasurer, Vernon Tarver. Delegate: Vernon Tarver. Endorsed W. B. Grayson for State Health Officer. Invited Councilor District meeting to convene at Star City, January, 1937.

1937—Nov. 26—Star City. Election of Officers: President, R. L. Johnson; Secretary and Treasurer, Vernon Tarver. Delegate to state meeting: Vernon Tarver. Voted to practice for government Farm Security Administration clients during 1938.

1938—Nov. 30—Gould. Election of Officers for 1939: President, Chas. W. Dixon; Secretary and Treasurer, L. T. Taylor. New member: L. T. Taylor, University of Arkansas, 1933, a transfer from Garland County Medical Society. Deceased: Vernon Tarver, a veteran of World War I.

Dec. 5.—Grady. Resolution adopted to preserve the old Minute Book, dating from 1896 to 1938, for its historic value, and not to be used further as a record of proceedings.

1940—Jan. 18—Star City. President, Chas. W. Dixon; Secretary and Treasurer, L. T. Taylor. Delegate to state meeting: R. L. Johnson. New members: B. L. Bailey, Memphis Hospital School, 1898, a transfer from Louisiana; Quinton Tarver, University of Arkansas, 1939. He was a son of Dr. B. F. Tarver. An impromptu meeting with the officials of the Arkansas Farm Security Administration. Chas. W. Dixon elected Vice-President, State Society, 1940-41; also President of 4th Councilor District, 1940-41.

Nov. 30—Gould. Election of Officers: President, Chas. W. Dixon; Secretary and Treasurer, L. T. Taylor. Delegate to state meeting: R. L. Johnson. Discussion of FSA program. Deceased: A. F. Williams, Cornerville.

1941—Jan. 9—Star City. Election of Officers: President, Chas. W. Dixon; Secretary and

Treasurer, L. T. Taylor. Delegate to state meeting: L. T. Taylor. Resolution adopted to "favor a closer supervision of the Medical Department of our State and National Society." State Society requested that dates of birth, place of graduation, and date of issuance of license be included in the county medical records. Local Health Units asked the Society to invite the Mobile X-ray unit of the State Health Department to visit the county. Chas. W. Dixon was chosen to serve on the Committee for Medical Preparedness from this county.

Jan. 29—Star City. Resolutions adopted to request the influence and support of Senator T. S. Lovett and Representative Allen Tarver in maintaining the Basic Science Law, active in its present form.

Dec. 12—Election of Officers for 1941: President, Chas. W. Dixon; Secretary and Treasurer, L. T. Taylor. Delegate to state meeting: L. T. Taylor. Guests: Fred Hames and Wm. Snodgrass, Pine Bluff. Resolution adopted to abandon the present cooperative plan for medical care of the FSA clients at the Crigler Unit. Discussion of the doctor's place and duties in the present emergency. Resignation: R. L. Johnson, formerly of Grady, retired from practice of medicine.

Note: The first register of physicians and surgeons in Lincoln county was in 1881.

Dr. William David Kersh was the first to register, on May 27th. Sixteen others registered that year.

This register closed in 1903, when the first state licenses were issued. The name of Dr. Chas. W. Dixon is the last name recorded in this Ledger, April 14, 1903.

From 1881 to 1903 there were a total of sixty-two (62) physicians and surgeons registered.

PIONEER DOCTORS OF LINCOLN COUNTY

Compiled 1942

MRS. CHAS. W. DIXON

Gould

Lincoln county was formed from portions of Drew, Arkansas, Jefferson and Dorsey (later known as Cleveland, 1885) counties, in 1871. Since the Lincoln County Medical Society was not organized until 1896, it seems advisable to consider the doctors who lived in the section now known as Lincoln county for a considerable length of time as **pioneers**.

Dr. Bushrod Washington Lee

Undoubtedly the first physician who settled in what is now Lincoln county, was Dr. Bushrod Washington Lee, born Petersburg, Virginia, July 17, 1809. He belonged to the noted Lee family of Virginia and was a cousin of Gen. Robert E. Lee, of Confederate fame. Dr. Lee settled about three miles below Old Auburn, on a tract of land he named "Midway." He married Miss Isabella Douglass, whose parents came from Virginia to that section in 1826, the first white people to settle there. Dr. Lee was sent to this place to "doctor the Indians." A large Quapaw Indian settlement was located about one mile west of Midway on the Douglass plantation. Isabella Douglass was the first white girl born in that neighborhood. The Indians were very friendly with their white neighbors; visited them, and their children played together. The older members of the Douglass family often spoke of how, later, Indians slept on the porch and guarded the women and children while their men were away in the Confederate Army. Dr. Lee grew plants from which to distill his medicines, among them the opium poppy. He is said to have lived in Little Rock for a time. Two sons, noted elsewhere in this record, were also doctors. Dr. Bushrod Washington Lee died July 8, 1876, and is buried in the Douglass Cemetery at Douglas.

Dr. William David Kersh

Perhaps next to the earliest physician of which we have record, who came to what is now Lincoln county, was Dr. William David Kersh. Dr. William David Kersh, of German descent, born March 15, 1824, in Charleston, South Carolina, was the first of four South Carolina brothers to come to Arkansas. On June 27, 1850, he married Miss Jane Sterling Moore, daughter of Col. William Moore of Winnsboro, S. C., whose father, Major Henry Moore, was born in Londonderry, Ireland. Both were of long lines of cultured ancestry. Dr. William Kersh was educated in Switzerland, spoke seven languages, received his medical degree from the University of South Carolina in 1845, and began the practice of his profession in Winnsboro, where he lived for eight years. He was also a naturalist, a noted geologist in South Carolina, and a mineralogist. Professor Upham Shepherd, the mineralogist; Alexander Agassiz, the naturalist; Sir Charles Lyell, the geologist; and Charles Dwight Dana, made up the coterie of the friends, contemporaries and patron scientists of Dr. Kersh. Many of Dr. Kersh's scientific writings were published in the Herald, the True Democrat, South-

ern Journal, and The Sage. Among them was one entitled, "The Evidence of the Paleozoic, the Mesozoic and the Pliocene Eras in Arkansas." The mineral and geological specimens gathered and classified in South Carolina before 1850 by Dr. Kersh was said to have been a larger, more varied and valuable collection than that of the state of South Carolina. In 1858, Dr. and Mrs. William Kersh removed from South Carolina to Mountain Home, in Drew or Bradley county, now a part of Lincoln county, Arkansas, where they established Lyell Seminary for young ladies. Dr. Kersh taught many higher branches, including astronomy, and instructed classes in chemistry with demonstrations in his laboratory. The post of state geologist of Arkansas was offered to Dr. Kersh, but he declined because of his scientific pursuits and practice of medicine. The garden of Dr. and Mrs. Kersh abounded in medicinal plants, and shrubs, the flowers, buds, leaves, roots and stems of which he distilled, boiled and dried into medicines for his patients. During the War Between the States, 1861-65, he grew opium poppies so that his isolated patients might not be deprived of opiates by the war's blockade. Dr. Kersh was accepted as a physician and surgeon in Company A, 9th Regiment, Arkansas Volunteers, May, 1861, but was denied active service on the front line because he was the only physician within a radius of twenty miles. Dr. Kersh was also a member of the Masonic order. The medical supplies of Dr. Kersh would have equipped a large pharmacy and his skill in concocting medicine was unsurpassed. Dr. Kersh employed leeches for many ailments, and practiced "cupping." He considered collard greens the best poultice to be found, used little dock for skin troubles, fly-blisters, bone-set for fevers, and poke-root for rheumatism. In 1858, Dr. and Mrs. Kersh sold their home at Mountain Home, and moved their school building to what is now Star City, where 100 pupils were soon enrolled. This was a noted school, pupils coming from as far away as New Orleans. Dr. Kersh continued the practice of medicine until his death in 1887. In his last illness he ordered many leeches to be placed upon his brow to ease the throb of blood. Dr. Kersh was the first physician to register in the County Register, May 27, 1881.

Dr. John Jacob Kersh

Dr. John Jacob Kersh, elder brother of Dr. William David Kersh, was born in Chester District, S. C., about 1807. He married Miss Hannah F. Cornwel, also a South Carolinian, in

1849. Dr. John Jacob Kersh was a graduate of the University of New York, studied medicine in Philadelphia, and practiced medicine in South Carolina from 1842 until 1859. In 1859 he moved to Arkansas, settled in what is now Lincoln county, where he farmed and practiced medicine; later lived in Star City. On January 15, 1874, Dr. John J. Kersh married Miss Mildred G. Watson, daughter of James Watson, who was born in Chester District, S. C., in 1857. Dr. John J. Kersh died in South Carolina in 1876, at about 69 years of age.

Dr. Godfrey Kersh

Dr. Godfrey Kersh was another of the brothers who settled in Lincoln county at this time, later removing to Star City. He was a most successful physician, noted for his unusual trees, flowers and plants, and the flock of peafowls in his mulberry grove, in which he grew silk worms. He married Miss Georgia Askew. The Kershs were men of note in the section of the county where they resided.

Dr. Virgil E. Kersh

The other of the four Kersh brothers to remove from South Carolina to what is now Lincoln county, Arkansas, was Dr. Virgil E. Kersh, who registered in Star City, July 4th, 1881. He also removed to what is now Star City.

Dr. A. G. Anderson

Among the leading physicians of Lincoln county was Dr. A. G. Anderson, born in Virginia, October, 1834; educated partly at Brownsville, Tennessee, and later at Richmond, Va. Dr. Anderson lived first at Searcy, White county, where he practiced medicine for several years. Later he moved to Lincoln county, located on Bayou Bartholomew. In 1871, Dr. Anderson moved to Star City, where he had a large, lucrative practice and agricultural interests. In 1862, Dr. Anderson enlisted in the Confederate army, was wounded at Corinth, Miss., 1862, and taken prisoner. In 1861 he married Miss Martha L. Jones of Alabama. After his release, he returned home, joined Col. Thompson's regiment, of which he served as surgeon until the end of the war. Dr. Anderson was a member of the Masonic Lodge and Knights of Honor. He died in Lincoln county, 1880, being killed by a negro.

Dr. James A. Stewart

Dr. James A. Stewart, of Scotch descent, son of S. C. and Lucinda P. (Allen) Stewart, natives of North Carolina, and Georgia, respectively, was born in Coweta county, Georgia, December

23, 1844. James A. Stewart emigrated from North Carolina to Georgia, and from Georgia to Arkansas, after he had reached manhood. Dr. James A. Stewart lived in Ashley, Bradley and Drew counties before he settled in Lincoln county in 1871. He learned the blacksmith's trade when quite young. His first marriage occurred in Georgia. In 1861 he enlisted in the Confederate Army, and was in the battles of Perryville, Murfreesboro, Shiloh, Chickamauga, and others, serving until the end of the war. He was shot through the body by a minie-ball at Jonesboro, and was reputed to be a brave soldier. After the war he was deputy collector for Bradley county, taught school, and all the time devoted his spare time to the study of medicine. He began practicing medicine at Cornerville, Lincoln county, July 4th, 1876, before obtaining his diploma from the Medical Department of the University of Louisiana, 1878. His second wife was Miss Laura A. Newton, daughter of John C. and Sarah Newton, of Mississippi. Dr. Stewart became a member of the Lincoln County Medical Society in 1897. He registered, Star City, August 27, 1881.

Dr. William C. Kimbro

Dr. William C. Kimbro, son of James and Elizabeth P. (Ray) Kimbro, of North Carolina, was born in North Carolina, about 1837. Both parents were of Scotch-Irish descent, and died in North Carolina. He was educated in North Carolina and Georgia, and at Madison Male Institute (a Georgia institution) and attended medical college in 1854-55, in Augusta, Ga. He began the practice of medicine, at Newton, Ga., in 1855, at the age of eighteen. Later he attended the College of Physicians and Surgeons in St. Louis and received his diploma from that institution in 1884. Dr. Kimbro came to Drew county, Arkansas, in 1860, located at Collins. He served in the 3rd Arkansas Regiment, Confederate Army, but was discharged on account of his health. After he returned to Arkansas he located at Midway. At this time he was physician to over 120 families, 80 of whom did not call any other physician during this long time, as far as is known. His territory was scattered, 10 miles in every direction, which required a travel of over 8,000 miles annually, it is said, to visit the sick. More than 400 persons were treated and visited every year. At this time he little more than cleared expenses. Dr. Kimbro married, 1863, Miss Lou J. Pritchard, of Drew county. He moved to Monticello, where he

lived for two years, and had a good practice. In 1886, he moved to Tyro, Lincoln county, where success crowned his efforts from the first. Dr. Kimbro was a very popular physician, with business ability, noted for his professional tact, excellent taste, and sound judgment. In April, 1897, Dr. Kimbro became a member of the Lincoln County Medical Society.

Dr. Jordan

Dr. Jordan came from Louisville, Kentucky, to South Bend about 1854. About 1857 he sent ready-cut materials, by steamboat, down the Ohio and Mississippi Rivers, and up the Arkansas, to build his beautiful home at a cost of \$40,000. This is one of the few ante-bellum homes of its kind still left standing in the state. Dr. Jordan lived there only a few years before his death. His widow married Dr. Charles Minoe Taylor, who came from Winchester, Kentucky, finally settling in Little Rock. It is claimed that Dr. Jordan was among those who endorsed notes for the state of Arkansas to borrow money at one time.

Dr. Charles Minor Taylor

About 1858, Dr. Charles Minor Taylor came from Winchester, Kentucky, to old Napoleon, a great shipping point on the Mississippi River, where he served as surgeon in the Marine Hospital built there by the U. S. Government at a cost of \$55,000. At that time Napoleon had about 2,000 inhabitants. Dr. Taylor served as surgeon in the Confederate Army; and moved to South Bend about 1872. He married first, the widow of Dr. Jordan, and lived at South Bend until about 1901, whence he moved to Little Rock—he married Miss Julie Hughes Prewitt of Kentucky. Dr. Taylor's beautiful home was purchased by Mr. Nick Smith, who eventually sold it to ex-Governor Lowden of Illinois.

Dr. J. K. McClain

Dr. J. K. McClain, son of Samuel S. and Elmira (Godfrey) McClain, natives of North Carolina, was born in Leak county, Mississippi, January 16, 1852. In 1857 the family moved to Bradley county, Arkansas, where his boyhood schooldays were passed, and to Lincoln county, in 1884. Dr. McClain began to study medicine in 1876, attended lectures at the University of Louisiana, and graduated from the Louisville Medical College in Kentucky, 1878. In 1880, Dr. McClain married Miss Anna Clary, who died the same year. In November, 1881, he married, secondly, Miss Mollie W. Simmons, daughter of Dr. J. G.

and Mary Simmons, of Lincoln county. Dr. and Mrs. McClain lived in Star City. He was prominent among the leading physicians in the county, and was engaged in the mercantile business, being so successful that he retired from both. Later he resumed the practice of medicine, and was one of the organizers of the Lincoln County Medical Society, in 1896.

Dr. J. G. Simmons

Dr. J. G. Simmons, son of Henry P. and Dolly (Burnett) Simmons, was born in Montgomery county, North Carolina. He attended Oak Grove College, and graduated from the Medical Department, University of Nashville, Tennessee, in 1859. After receiving his diploma, Dr. Simmons began the practice of medicine in Springdale, Mississippi, coming to Lincoln County in the fall of 1860, where he continued his professional life until 1875. His wife was Miss Mary M. Smith. Dr. Simmons was a surgeon in the Morgan Regiment, 1861-65, and first Democrat to be elected as representative from Lincoln county. He died in Lincoln county, at his home near Star City.

Dr. George W. Rowell

Dr. George W. Rowell, son of William and Sarah (Hancock) Rowell, natives of Lancaster District, S. C., was born in Cass county, Georgia, May 7, 1837. His parents removed from Georgia to Alabama, thence to that part of Drew county now known as Lincoln, in 1868. When he studied medicine he located at Tyro and commenced to practice his profession. Dr. Rowell attended Louisiana University in 1869-70-71, graduated with high honors in 1871. In 1874 he married Miss Mary J. Townsen (b. 1853).

Dr. Samuel Henry Pendleton

Dr. Samuel Henry Pendleton, son of Mace Coleman Pendleton and his wife, Susan Ballinger, of Amherst county, Virginia, and Salisbury, N. C., was born March 26, 1826. Dr. Pendleton was a member of Emory College, while W. Collins was president; a graduate of Jefferson Medical College of Philadelphia, and traveled and studied abroad. The Pendletons are of English descent. Dr. Pendleton at one time lived in Lynchburg, Va. He married first, Miss Anna V. Baker at Sencie, N. C., May 16, 1848, and lived at Cotton Grove, Davidson county, N. C., until 1859, when they removed to Arkansas county, Arkansas, and settled at the place still known as Pendleton, which was named for him. Dr. Pendleton at-

tained celebrity by his skill and learning in Virginia, North Carolina, and Arkansas, going great distances on consultations. After the death of his wife in February, 1864, he married, secondly, Miss Ellen Douglass. Some time later he removed to Douglas, where he died. The grandson of Dr. Samuel Henry Pendleton, Dr. Chas. W. Dixon, of Gould, has inherited the beautiful case of surgical instruments which his grandfather used, bought just after he returned from Europe prior to the War Between the States, 1861-65.

Dr. Pleasant Henderson Pendleton

Dr. Pleasant H. Pendleton, born in Salisbury, N. C., 1853, was the son of Dr. Samuel Henry and Anna Virginia (Baker) Pendleton, of Virginia, North Carolina, and Arkansas. In 1859 the family moved to Arkansas county, Arkansas, and settled at Pendleton Landing (named for his father). After the death of his father he was placed in a private school in Philadelphia, 1863, where he remained for a few years. Then he attended school in Ansonville, N. C. He finally was entered at Calvert College, near Emmittsburg, Maryland, where he graduated at the age of seventeen, being the valedictorian of his class and receiving his A.B. degree. He graduated in medicine in 1875, at the Louisville Medical College, and received degrees at Central University at Louisville, having in the meanwhile been elected to serve for one year as first physician with three assistants in the Charity Hospital in Louisville, receiving this honor in competition with sixteen of the brightest intellects of the four medical colleges of the city. Dr. Pendleton served through the yellow fever epidemic in Memphis in 1878. In 1874, at the outbreak of the Brooks-Baxter War, Pleas. H. Pendleton, who was then studying medicine, joined the forces and was a lieutenant of a company organized in his neighborhood. He entered medical college the next year. In 1876, Dr. Pendleton returned to his home in Lincoln county and married Miss Fanny Moore, daughter of Col. James Moore, of Mound Grove, Arkansas, near historic Arkansas Post. In 1892 he moved to Pine Bluff, where he died in 1899. Dr. Pendleton was noted for his skill in surgery; a man of genuine culture; of cordial manner, sincere, kindly, and charitable to all. He left no issue. Dr. Pleas. H. Pendleton registered, Star City, August 11, 1881. Dr. Chas. W. Dixon, Gould, is a nephew of Dr. Pleas. H. Pendleton.

Dr. Richard Henry Lee

Dr. Richard Henry Lee, son of Dr. Bushrod Washington Lee (undoubtedly the first physician to what is now Lincoln county), and his wife, Isabella (Douglass) Lee, was born at "Midway Plantation," below Old Auburn, December 21, 1860. He was educated in Virginia; never married; died April 4, 1887, and is buried in the Douglass Cemetery at Douglas.

Dr. William Charles Weeks, Jr.

Dr. William Charles Weeks, Jr., son of Dr. William Charles Weeks and his wife, Patsy (Judkins) Weeks, of Petersburg, Virginia, was born November 14, 1824. He settled at Old Auburn, later called Douglas, and married Miss Kate Douglass, whose parents came to that section in 1826. Dr. Weeks served in the Confederate Army. He died January 10, 1862, and is buried in the Douglass Cemetery at Douglas.

Dr. H. A. Austin

Dr. H. A. Austin, from Old Auburn, registered at Star City, September 14, 1881.

Dr. G. W. Springfield

Dr. G. W. Springfield settled near Varner about 1860 on the property now (1942) owned by Mr. Tom Free, Sr.

Dr. Alonzo Varner

Dr. Alonzo Varner, came from Georgia to what is now Varner, 1857. He was graduated from a medical school in Virginia, afterward studied in Louisiana. Dr. Varner joined the Dixie Grays, 1861-65, and served as a surgeon at Arkansas Post during this period. After the war he returned to Georgia, where he died.

Dr. James Langston Goree

Dr. James Langston Goree, of Huguenot ancestry, to Manakin Town, Virginia, where the name was spelled Gaury, and several other ways, was a resident of Marion, Perry county, Alabama. He married Miss Mary Elizabeth Dixon, daughter of Dr. Don Carolus Dixon and his wife, Elizabeth Harriet Bilbo (Bilbaud) on August 14, 1841, Smith county, Tennessee. The history of Judson Female Institute, Marion, Alabama, established in 1839, states that Dr. J. L. Goree, was one of the first trustees, 1839, and served in that capacity for several years. Dr. and Mrs. Goree came to Arkansas several years before 1858, and lived at "Maple Grove," just above Old Auburn, the present site of Cummins. Dr. Goree had a

keen sense of humor. An interesting story is told of him in connection with Henry M. Stanley, who in 1861 was clerking in Mr. Louis Altschul's supply store at Old Auburn. Henry M. Stanley, a London work-house boy, came to Arkansas by way of New Orleans; became a world-famous newspaper correspondent and explorer, discovered the Congo, found Livingston, and was knighted by Queen Victoria. The story goes that when the men for miles around Old Auburn were flocking to register in the Confederate Army, 1861, the young English boy was not interested, and was anxious to get away from that part of the country. One day he received a package which he thought came from his sweetheart in the neighborhood; several onlookers were there to see him open the package, which contained a petticoat and chemise. He hastily hid the garments and left the room. In the afternoon Dr. Goree called upon Stanley, was unusually cordial and asked him if he did not intend to join his fellow citizens in the fight. Henry replied "yes." The company in which he served was the Sixth Arkansas Regiment, Col. Lyons commanding. Stanley was captured by the Yankees, later served in the Federal Army before he entered the newspaper world.

Doubtless there were many other doctors in what is now Lincoln county whose names have not been recorded anywhere, or are unknown to the compiler. Additional information will be welcome.

Authorities: Family, cemetery, Bible and court records; old college records; Arkansas Gazette and Arkansas Democrat clippings; Biographical and Historical Memoirs of Southern Arkansas, published 1890, by Goodspeed Publishing Company.

If there is such a thing as a profession as a concept distinct from a vocation it must consist in the ideals which its members maintain, the dignity of character which they bring to the performance of their duties and the austerity of the self-imposed ethical standards.—Law Notes.

Too much of what we read of medicine today is negative in tone, full of accusations and refutations, surcharged with demands for radical change and fantastic accomplishment.—Milwaukee Medical Times.

TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

AS MILLS and factories hum, as thousands of men and women swell the ranks of labor under the pressure of war industry, problems concerning the health of workers are in danger of being pushed aside. Tuberculosis is one of the notorious wasters of manpower. Special attention must be given to this disease as it affects, and is affected by, occupation. To help clarify concepts, a symposium on tuberculosis in industry was held at the Saranac Laboratory where leaders in health and industry discussed problems which will also interest the general practitioner. A resume' of the symposium follows:

TUBERCULOSIS IN INDUSTRY

The prevalence of tuberculosis in any community is determined by the general standard of living and by the number of open carriers. In particular occupations the factors of selective employment and unfavorable environment modify the picture. If such factors, work involving silica, for example, are dominant, the incidence in the wage earners will be different from that of their families.

The source of the great bulk of infections is a human carrier with a pulmonary cavity. While the home is probably the place of most childhood and some adult contacts, many primary infections and more reinfections must occur in the place of work. Nurses, physicians and attendants on the sick encounter a real occupational hazard from infection itself and this hazard should be accepted as incidental to the professional life while hospital management should assume the obligation of minimizing opportunities for mass infection.

About 65% more young women than men die of tuberculosis between the ages of 15 and 25. From a practical standpoint the employer of large numbers of women needs an effective medical department if he would avoid a tuberculosis problem. Race is a factor to be considered but it is so intricately associated with the effects of living standards and environment that its effects cannot be weighed. Nutrition is another important factor but also one of the most difficult to evaluate. The influence of fatigue has been studied in the automobile industry and in a steel mill and in neither case was there evidence to

suggest that this factor was responsible for any excess of tuberculosis. The belief that abnormal degrees of temperature and humidity lower resistance has little to support it. Trauma does not initiate a primary infection of the lungs.

Tuberculosis has been regarded as the great enemy of the printer (printers and painters have about 16% more tuberculosis than all occupied males) and in turn was attributed to lead poisoning which printers might have contracted. Certain studies indicate that neither lead absorption nor lead intoxication is the cause of excess tuberculosis among lead and zinc workers.

Fumes and gases are inhalable and many of them are sufficiently irritating to provoke severe inflammatory reaction. Mature judgment on the effects of gas used by the armies during the last war reversed the early opinion that this agent was responsible for the excess of tuberculosis that developed. Routine annual examination of a large group of employees engaged in the manufacture of chlorine, phosgene, hydrofluoric acid and other irritating gases, supports the view that exposure to irritant gases is not responsible for excess tuberculosis.

The general thesis that inflammation of the lungs is necessarily unfavorable to the course of associated tuberculosis has little support. It is probably true that certain kinds of inflammatory reactions may have some influence. The increased incidence of tuberculosis that followed epidemic influenza may have been due in part to pneumonic complications.

In grain handlers exposed to high concentrations of organic dust in unloading lake steamers, 2.5% of a group of 234 showed X-ray evidence of clinically significant tuberculosis and another 2.3% had old healed lesions. Social-economic factors rather than grain dust were thought to be responsible. Tobacco dust has been under suspicion as a cause of tuberculosis since Ramazzini's time in 1700. Yet, in a modern cigar factory with a well organized medical service and air conditioned rooms there was less tuberculosis than in the city where the plant was located. Metropolitan mortality figures for 1937-39 show an index for tuberculosis of 107 in cigar and tobacco factory operatives but it should be noted that 75% of the labor, which now produces only 25% of the product still works in small shops without health supervision.

Low rates for tuberculosis were found in the Saranac Laboratory studies of the cement and gypsum industries. The usual amount of healed infection was disclosed, so that opportunities for infections had not been lacking.

All these observations support the view that exposure to organic and nonsiliceous dusts has little influence on susceptibility to tuberculosis. Reports on foundries, quartz mining and the granite industry brought out that higher tuberculosis rates prevail in these trades, that there is a greater tendency for such infection to develop after the age of 40 rather than earlier and that the infection is extremely chronic, often giving no symptoms of intoxication or a positive sputum until shortly before death. In miners the incidence becomes higher and the prognosis of associated tuberculosis worse as the silicotic reaction increases. Miners exposed to silica dust with no roentgenographic evidence of reaction showed little more tuberculosis than the community in which they lived. Foundries seem to be responsible for the least amount of tubercu-

losis, while the granite industry showed that it probably caused the most.

Vermont marble workers had two and one-half times as much tuberculosis as the general population of the state (largely rural) exclusive of the granite center in Barre. By contrast, the rate for granite workers was 130 times the general one.

The value of a good industrial hygiene program was brought out by the experience of the Eastman Kodak plant. This program costs \$10,500 annually, but it also costs \$3,218 to treat one minimal case of tuberculosis. The attack rate in this plant has fallen from 2.3 at the outset of a study to 0.2 at the present time.

The complexities of compensation insurance carriers were discussed. One plan proposed was that evidence of tuberculosis in any form should preclude employment in industries with silica or other proved hazards and that compensation should be allowed for all tuberculosis subsequently developing in such employment. In other industries, with no specific hazards, persons with healed tuberculosis should be permitted to work but no compensation should be allowed for infections that might become active or develop during employment. In view of the evidence that old tuberculosis so rarely breaks down in any industry except industries with silica hazards, this would appear most equitable.

In the summary it was pointed out that, aside from nutrition and social-economic factors, silica is the only other one which has a recognized effect on susceptibility to tuberculosis. Many industrial conditions popularly accepted as predisposing to this disease are without measurable effect.

A Symposium on Tuberculosis in Industry Held at the Saranac Laboratory, Saranac Lake, New York, in June, 1941: A Resume'. *Journal of Amer. Med. Assn.*, Feb. 21, 1942.

"Tuberculosis in Industry," a paper-bound volume of 374 pages, with fifty charts and illustrations, is a complete symposium contributed by twenty-eight industrial hygienists at Saranac Lake, June, 1941. It may be obtained from any local or state tuberculosis association or the National Tuberculosis Association, 1790 Broadway, New York, N. Y. Price on request.

The President's Page

THE ARKANSAS MEDICAL SOCIETY:

Before the war there were 1,819 doctors in the State of Arkansas part of whom were eclectic practitioners. This gave a ratio of one doctor to 1,113 people. The national ratio was one doctor to 750 people.

The present membership of the Arkansas Medical Society is 1,019. There are probably several hundred physicians in Arkansas who are eligible for membership and should be solicited to join the organization. If a doctor is eligible and there is no county society in his county, then he should make application in an adjoining county.

There are 60 county societies of which three are joint societies of two counties. There is one society composed of four counties and another composed of three counties. There are seven councilor district societies. There are a number of county organizations that meet only once a year and the reason for that meeting is the election of officers. These should meet more often and have programs.

The coming meeting of the Arkansas legislature will be an important one as far as medicine is concerned. It is desired that each county society appoint a legislative committee composed of men who will take an active interest and work with the State Legislative Committee during the meeting of the legislature. Dr. Brooksher should be advised concerning the personnel of these committees.

It is hoped that interest in organized medicine will not lag during the war.

R. B. ROBINS, M. D., President

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EDITORIALS

PROCUREMENT AND ASSIGNMENT OF PHYSICIANS

It has been officially announced that the Army needs 3,000 medical officers each month to January 1st, 1943. The needs of 1943 are yet to be announced. The need for medical officers is immediate and urgent. The army has further signified that it prefers physicians under 37 years of age at this time.

A Medical Officer Recruiting Board has been established at 423 Hall Building, Little Rock, Major Daniel H. Autry, a native of Arkansas, in charge, whose function is to expedite the commissioning of physicians in the army medical corps.

By now it should be obvious that the Federal government has adopted a liberal attitude in its efforts to secure physicians for the military forces. There has been no compulsion; all appointments have been solely on a volunteer basis. However, Selective Service has indicated that physicians in the needed age-group are, or will shortly be, reclassified in I-A. Paul V. McNutt, speaking at Atlantic City, June 8th, said: "We

are not getting enough volunteers. It is absolutely necessary that there is an immediate and significant increase in the number of volunteers, or else some other method of procurement will be required soon." This will mean an end to the volunteer method of procurement now in effect under the direction of the organized medical profession.

Mr. McNutt also said: "For the military services younger men must go. They must realize their duty now. * * * They must make whatever arrangements are necessary for their older associates to handle their practices.

"The voluntary plan must work and work promptly—or some other more vigorous plan will have to be produced."

The duty of younger physicians is clearly shown. The need is immediate and urgent. Volunteer today.

DOCTORS AND TIRES

Considerable criticism has been directed against members of the medical profession who have enjoyed long winter vacation trips, via automobile, in the southern sections of the country, as well as into Mexico. While it is quite proper that doctors have a preferment in the matter of automobiles and their equipment, it is manifestly unfair that any undue advantage be taken in the matter.

Some physicians who made these trips were rather severely criticised by residents of the southern sections for taking such an advantage. One such physician said he not only had been asked why he was running about the country in his car, but why he was not in the Service, as well.

On several occasions private patients have expressed themselves very clearly. One man, prominent in a local CIO group, bitterly complained that he and his fellow employes were not to be permitted to have new tires, to be used in going to and from employment in the essential industries, but that medical men had no trouble in getting new tires, that they might take prolonged trips.

It is manifestly unfair and should not be. Physicians have no more right to new automobile equipment than any other group of citizens, except when the cars are used for professional purposes. With all the many curtailments now coming from Washington, the medical profession should "play ball" along with the rest of the population.

Use your cars for professional purposes, but limit their use in pleasure jaunts. That reminds us—most doctors take vacations—all doctors should take vacations; but let's do it by train rather than use precious rubber and gas.—J. Ohio S. M. Soc.

PROCEEDINGS OF SOCIETIES

The Ninth Councilor District Medical Society met in luncheon session at Harrison, June 3rd. The following program was presented: "Human Element in Medicine," R. B. Robins, Camden; "Clinical Syndromes in Coronary Diseases," S. C. Fulmer, Little Rock; "Fractures of the Ankle," Jos. F. Shuffield, Little Rock; "Diagnosis and Treatment of Urinary Calculus," G. W. Reagan, Little Rock; and "Procurement and Assignment Service," W. R. Brooksher, Fort Smith.

The Fifth Councilor District Medical Society met in dinner session at Magnolia, June 2nd for the following program: "The Acute Abdomen," R. B. Robins, Camden; "Medical Legislation," Jos. F. Shuffield, Little Rock; and "Procurement and Assignment Service," W. R. Brooksher, Fort Smith.

The Pulaski County Medical Society met June 1st for the following program: "Diagnosis, Management and Treatment of Syphilis," D. W. Dykstra, Little Rock; "The Visiting Nurses' Association in Little Rock," Chas. R. Henry, Little Rock, and "Medical Officer Recruiting Board," Major Daniel H. Autry, Camp Robinson.

T. Duel Brown, Secretary.

The annual banquet session of the Conway-Perry County Medical Society was held June 11th at Petit Jean State Park with T. W. Hardison as host.

The Third Councilor District Medical Society met in dinner session at Brinkley June 18th for the following program: "The Acute Abdomen," R. B. Robins, Camden, and a discussion of organization problems by Jos. F. Shuffield, Little Rock; W. B. Grayson, Little Rock; Maj. Daniel H. Autry; Little Rock, and W. R. Brooksher.

The Second Councilor District Medical Society met in dinner session at Batesville June 16th for the following program: "The Human Element in Medicine," R. B. Robins, Camden; "Medical Legislation," Jos. F. Shuffield, Little Rock; "Procurement and Assignment Service," W. R. Brooksher, Fort Smith, and "Medical Officer Recruiting Board," Maj. Daniel H. Autry, Camp Robinson.

The Arkansas Chapter, American College of Surgeons, was organized at a meeting in Searcy June 15th, the following being elected officers: M. C. Hawkins, Jr., Searcy, President; A. S. Buchanan, Prescott, Vice-president, and D. E. White, El Dorado, Secretary. The scientific program was as follows: "Surgery of the Chest," J. K. Donaldson, Little Rock; "A Review of the Literature on Herniation of Intervertebral Disks," Jos. F. Shuffield, Little Rock, and "Urological Problems of Interest to General Surgeons," H. Fay H. Jones, Little Rock. The next meeting will be held in Little Rock during December.

PERSONALS AND NEWS ITEMS

N. T. Hollis, Little Rock, addressed the Kiwanis Club, June 2nd, on the State Hospital.

J. Harry Hayes, Little Rock, recently attended surgical clinics in Birmingham and Atlanta.

T. P. Foltz, Fort Smith, has been called to active duty as Lieutenant (jg) Naval Medical Corps and assigned to Naval Hospital, Corpus Christi, Texas.

Ben H. Pride, Fort Smith, has been called to duty as Lieutenant, Army Medical Corps, and assigned to McCarran Field, Las Vegas, Nevada.

S. S. Kirkland, Fort Leonard Wood, has been promoted to Captain, Medical Corps, U.S.A.

O. B. Barger, Mountain Home, has been called to active service as Lieutenant, Army Medical Corps, and assigned to the 601st Coast Artillery (A-a), Municipal Stadium, Philadelphia.

Jerome S. Levy, Little Rock, has been called to active duty as Captain, Army Medical Corps, and assigned to William Beaumont General Hospital, Fort Bliss, Texas.

G. R. Siegel has been elected president of the Clarksville Golf Club.

H. Fay H. Jones, Little Rock, attended the American Urological Association in New York City during June.

Jim McKenzie, Hope, has been called to active service as Lieutenant, Army Medical Corps, and assigned to Bowman Field, Louisville.

Dr. and Mrs. Theo Freedman, Little Rock, recently visited in Portland, Oregon.

A. C. Kolb, Hope, has been elected a fellow of the American Psychiatric Association.

S. A. Thompson was King Cotton for the Camden Cotton Ball, May 22nd.

J. D. Riley, State Sanatorium, delivered the commencement address to the University of Arkansas School of Medicine, June 9th.

MARRIED—Capt. W. O. Loftis and Miss Juanita Cox, Pocahontas, on May 9th.

M. J. Kilbury, Little Rock, recently addressed the Tri-Dental Association on "Actinomycosis."

J. O. Pierce, Marked Tree, has been called to active duty as Lieutenant, Army Medical Corps, and assigned to the air force at New Albany, Georgia.

L. J. Kosminsky, Texarkana, recently addressed meetings of the Forty and Eight in Orlando, Florida; Newark, New Jersey; Cleveland, Ohio; Rochester, Minnesota, and Niagara Falls, New York.

R. L. Wood has moved from Delight to Malvern.

R. H. Whitehead, DeWitt, attended the International Rotary meeting at Toronto during June.

Alan A. Gilbert, Fayetteville, has been re-elected Chairman of the Washington County Chapter, American Red Cross.

H. King Wade, Hot Springs National Park, attended the American Urological Association meeting in New York City recently.

O. L. Atkinson, Hampton, has been elected Commander, District Eleven, American Legion, Department of Arkansas.

MARRIED—On June 16th, at Jonesboro, R. C. Shanlever and Miss Mary Jane Nisbett. Dr. and Mrs. Shanlever are on a trip to the north and east and attended International Rotary at Toronto.

T. P. Foltz, Naval Station, Corpus Christi, has been promoted to Lieutenant.

E. J. Byrd has been elected vice-president of the Camden Lions club.

Members registered at the Atlantic City session of the American Medical Association were: E. E. Barlow, Dermott; W. R. Brooksher, Fort Smith; Alan G. Cazort, Little Rock; J. N. Compton, Little Rock; D. W. Goldstein, Fort Smith; C. M. Harwell, Osceola; Glenn H. Johnston, Little Rock; D. K. Kitchen, Detroit; D. C. Lee, Hot Springs National Park; J. A. Moore, El Dorado; B. James Reaves, Little Rock, and U. R. Ulferts, Hot Springs National Park.

J. E. Little has been transferred from State Sanatorium to Wildcat Mountain Sanatorium, Fort Smith.

OBITUARY

JAMES LOUIS POST, age 59, died at his home in Van Buren May 24th following a heart attack. Born at Altus in 1884, he graduated from Subiaco Academy and received his degree from Saint Louis University School of Medicine in 1907. Formerly in practice at Altus, he had been in Van Buren for the past three years. He was a member of Saint Mary's Church, Altus, and of the Knights of Columbus. Surviving relatives are his wife, a daughter, two brothers and two sisters.

RANDOM THOUGHTS OF THE SECRETARY

June 2nd. Rising to the cool 70 degree temperature of the air at 3,000 feet we take off for Magnolia to attend a banner session of the Fifth Councilor District Medical Society. Hospitality abounds, Wilson, Carrington, and Smith all insisting that we spend the night with them, but the youngster and I place ourselves in the Columbia Hotel, not outdoing Carrington who takes us to breakfast at 6:30 the next morning.

June 3rd. Returning home by air, we promptly take to the Chevrolet at the airport and head north where Clyde McNeil furnishes a car and a driver, luxury indeed, for the trip to Harrison. Again we talk on procurement and assignment bringing forth the joint statement by Clyde, Joe and Bob that should we miss the next meeting, they will give the talk, and well they may. Homeward bound, we stop at Fayetteville, where we repeat our speech to the interested group of the Washington County Medical Society, and without further ado, down the mountain home, having had but one formal meal this day, thanks to Carrington. This is one of those full days, starting at six in Magnolia, taking in Harrison, Rogers and Fayetteville, not to mention a side trip to Seligman, Missouri, and ending at home at 12:15 a. m.

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June 6th. En route to Atlantic City, Goldstein demonstrates a practical knowledge of railroad ticket exchanges worth one dollar more than was ours.

June 7th. This day across Illinois, Indiana, and Ohio and into Pennsylvania as colleague Barlow shares his section with a soldier and his wife while we enjoy seclusion to read and nap and liking the sleep so well, we call it a day at nine.

June 8th. Arising early in North Philadelphia and to the convention city by the sea in a long, long train, and thence by taxicab to devious stops, much in the manner of hometown taxis which originated the proposition of running as small buses to various sections of the city. In the House of Delegates we become a professional motion supporter which has its lighter moments. In the evening McNutt talks of procurement and assignment in tones far more firm than we have employed and the meaning of what is follow a failure of volunteer recruitment is easily understood. On the boardwalk we get our first glimpse of this war as lights are out or dimmed all along the thoroughfare.

June 9th. Occupied with the business of the day with much interest in Dean Cornwell's discussion of his latest painting in the John Wyeth series and art now means more to us. In the late evening, Goldstein is a room caller with the news of the scientific session, as yet unknown to us, and after his departure comes a phone call from home principally to inform us that Amis is on leave as though this information is worth being awakened at 1:00 a. m., much less to have to pay the toll for the news.

June 10th. Meeting Kitchens on the boardwalk we talk over the Hot Springs session and wonder where can be Cazort, J. A. Moore, Glenn Johnson, D. C. Lee and B. J. Reaves among the small number from Arkansas. In the afternoon meeting with the national committee on procurement and assignment and the old familiar questions again come, this time from state chairmen, of all people.

June 11th. For the morning to the scientific sessions and the exhibits, observing that the free Coca-Cola booth and the Camel cigarette novelty souvenir attract all the registrants and many hundreds of Atlantic City folks. Concluding the House of Delegates and away for the west, leaving Barlow without a reservation in sight, and for all we know, he may have decided to practice in Atlantic City.

June 16th. The traveling state society group visits Batesville, and for the first time in our attendance here, we talk in daylight, no doubt alarming to the audience who may well expect us to keep it up until dark. On the return trip we heckle Clyde McNeil sufficiently that he forgets the story he had to tell and miss greatly the conversation of the Batesville-Little Rock section of the trip as we make the lonely drive home to check in at 4:40 a. m.

June 18th. Remembering the ease of the Magnolia trip, we again take to the air for Little Rock, joining the troupe at Little Rock, again the guests of the United States, courtesy of Major Daniel H. Autry, and on to Brinkley, where the Third District turns out in good numbers. The meeting adjourned, Robins' train is late, and your president and secretary discuss many matters until 12:15 a. m., when we board trains for our respective residences. For this trip we have the most comfortable berth ever made down in a Pullman and sleep, oh, so well, past Booneville, and on in home via bus for the work of the day.



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CONTACT DERMATITIS *

ELLIS P. COPE, M. D.
Little Rock

Contact dermatitis is the inflammatory response of the skin or mucous surfaces to some agent which causes irritation by its action on those surfaces. The older terminology called this inflammatory response dermatitis venenata, or simply dermatitis or eczema.

Contact dermatitis is probably the most common dermatologic entity for which patients consult all physicians. It is **one** skin manifestation which is generally easy to recognize and the successful treatment of uncomplicated cases requires no detailed special training or equipment. At least eighty per cent of cases of contact dermatitis can, and should be, treated by the general practitioner, the surgeon, or specialists in fields **other** than dermatology. A patient with a skin disease, generally first consults the family physician or a close medical friend; if this consultation affords him relief, it is a source of great satisfaction to the patient and he enhances the reputation of the doctor by his voluble gratitude.

There are literally thousands of potential causes of contact dermatitis, since no body surface is free from the effects of some agent which causes this disease. These agents are classified into two main groups (1) the "primary irritants" and (2), those causing inflammation by an allergic mechanism. The primary irritants are usually strong acids, alkalis or caustics which exert their effects by direct action on the skin. This group usually presents no diagnostic difficulty since the agents are generally well known, even by the patient, to be destructive, and the morphology of the irritation is that of a corrosive. There may, of course, be serious problems in therapy of such a burn.

The second, or the so-called "allergic group," of causes is far more important because it includes all the myriad numbers of simple chemicals, dyes, cosmetics, plants, etc., which most of

us can handle without harm. This group is vastly more significant now because, (1) the increased use of new plastics; (2), the substitution of materials, finishers, dyes, perfumes, etc., due to war priorities; and lastly, the increased exposure of large groups of people to new chemicals and vegetation in the building and operating of war industries, has multiplied the potential incidence of this form of skin disease many thousands of times. From this point on, all mention of contact dermatitis will refer to the "allergic" form.

Since the actual mechanism of the development of contact hypersensitivity is not known, I shall not discuss the various theories proposed. It is known, however, that persons can use the offending materials for long periods of time without irritation and then, unexplainably, develop the characteristic dermatitis. Also, when hypersensitivity develops on the very first exposure, there is an incubation period of from four to fifteen days before the inflammatory response.

The diagnosis of contact eczema rests on recognition of the appearance of the eruption, familiarity with the usual causative agents, and the skin sites which they most often effect. The excitants or irritants are almost always water or oil soluble. As stated previously, they do not necessarily have to be newly-acquired exposures.

The History

The first and most important detail in diagnosis is the history. This history should make careful note of the exact time of beginning of the eruption, the exact area of its inception, the exact appearance and symptoms produced by its earliest form. The patient should be asked to give a careful statement concerning the type of remedy first used, its method of application and removal. He should then tell the day to day progress of the eruption, that is, in its initial location, as well as the next sites involved. All changes of treatment, activities, and his own impressions of his condition from day to day should be detailed. After the complete history of the eruption itself is secured, an equally complete

* Read before the Sixty-seventh Annual Session, Arkansas Medical Society, Hot Springs National Park, April 28, 1942.

history of his activities before the eruption began is secured. Questions are asked concerning (1) personal hygiene—soaps, creams, lotions, topical medicines, he has used on himself and on others, new, or recently cleaned or dyed clothing; (2) employment—materials used and how they are used, do others in his business have the same trouble, what dusts are encountered, sprays, cleaning materials at work for himself or his equipment; conditions of heat, cold, wet sunlight (these questions can, of course, be modified to suit the housewife); (3) hobbies—woodworking, painting, hiking, golfing, etc. It is understood that the location and history of the eruption itself will dictate the scope of the history, and many eruptions are self-evident, requiring very little history for diagnosis.

The entire medical past history of the patient is next elicited with special interest being shown to previous skin conditions and allergies. Irritations from remedies used in previous eruptions should be carefully noted. Specific questions are asked concerning infantile eczema, asthma, hayfever, hives, loss of hair, dandruff, athletes' foot, and poison ivy.

The family history, in obscure cases, may give a clue, so queries are made concerning the incidence in blood relationship of hayfever, asthma, migraine, eczema, hives, seborrheic conditions, diabetes, and psoriasis.

The Examination

The entire body surface should be inspected during a dermatologic examination. It is more productive, if the first site of the eruption is first inspected and succeeding areas scrutinized in the order in which they were involved. This procedure gives a morphologic birdseye view of all stages of the development of the dermatitis. Areas stated to be uninvolved are carefully examined to substantiate the history; perhaps to discover new lesions of which the patient is unaware or considers too trivial for mention. These unmentioned lesions may definitely make the diagnosis. Incidentally, other lesions such as early cancers or the stigmata of syphilis may be discovered.

Contact dermatitis, as has been previously stated, can, and does, occur on any part of the body but is much more common on exposed parts. The acute contact dermatitis is characterized by a fairly-well circumscribed area of redness, swelling, vesiculation, oozing, crusting and scaling. The symptoms are of burning and smarting rather than itching. The more chronic

forms show thickening of the skin and lichenification. The chronic response is due either to a lower sensitivity of the patient or a less massive exposure over a long period of time. The distribution of the eruption may be readily explained by some point in the employment history or by merely watching a nervous woman rub her face while the history is being taken.

The differential diagnosis of contact dermatitis rests on separating this entity from other eczematous conditions which simulate it. The most frequent, important, and confusing of these are (1) atopic dermatitis, (2) seborrheic dermatitis, and (3) eczematous fungous eruptions and their "ids." I should like to contrast, briefly, a typical case of each of these, with a typical case of contact dermatitis.

Atopic eczema is vesicular only in infants or in adults who have applied irritating remedies. The patient, assuming he is past infancy, usually gives a history of having one or more relatives who have had hayfever, asthma, hives, migraine, angioneurotic edema, or atopic eczema. He usually has had infantile eczema and may have had hayfever or other allergic manifestations. His eruption tends to be seasonal, is intensely itchy and is predisposed to localization on the antecubital and popliteal areas and sides of neck. The eruption itself is usually subacute, with some thickening of the skin, exaggeration of normal skin lines, excoriations, mild pigmentation and perhaps some fissuring. It is very rare past the age of thirty-five or forty years. Eosinophilia is commonly found and reactions to scratch tests with inhalants or foods are usually secured.

The patient with seborrheic dermatitis is usually past twenty years of age. He gives little of significant family history. His past history gives few clues, although he may say he has always had an oily skin or been lately bothered with dandruff and falling hair. The seborrheic eruption tends to localize at the borders of the scalp, the eyebrow regions, the para-nasal creases, behind the ears, the sternal area and in the armpits and groins. The eruption is typically subacute, with moderate "greasy" inflammation, worse in the creases and fading into yellowish scales or crusts at the borders. The symptoms are itching, if no fissures are present, and pain if they are. Where intertriginous areas are involved, the eruption tends to be worse in hot weather. Laboratory work will be essentially negative.

The typical cases of eczematous fungous eruption is that of a young adult who gives a history

of having a "blister" eruption between and beneath the toes which was treated with some home remedy. Some ten days later there appeared, on the sides of the fingers and in the palms, deep vesicles, swelling pain. The eruption may be severe enough to show an early lymphangitis with all its attendant local and systemic signs. If the eruption is limited to the groin it usually has a more inflammatory border with some signs of clearing toward the center. Pathogenic fungi must be demonstrated by culture or fungi seen microscopically after scales or blister tops have been digested in twenty per cent sodium hydroxide, to definitely prove fungus origin.

There is no typical case of contact dermatitis, since it can affect any part of the body, and either stay localized or spread to cover the whole body surface. Arbitrarily selecting a case to discuss, we will take the instance of the young lady who decides to renew her dress shields. If the moisture-proofing material is one to which she has never been exposed, there is a period of a week or longer during which she has no trouble. However, she will soon develop redness, stinging, and probably small blisters, on the medial aspect of the arms and the lateral walls of the chest. An important point to keep in mind is that the dome of the axillae is not affected with contact dermatitis due to clothing, but is affected if it is due to a deodorant which is deliberately placed there.

Treatment

Having arrived at a positive diagnosis of allergic contact type dermatitis, treatment consists of two procedures: (1) to eliminate exposure to the irritant, and (2) to soothe the inflamed skin. Identifying the actual excitant may not be an easy matter, but the initial site of the eruption, the direction and time of its spread, when correlated with the history will usually narrow the group of suspected agents to at least a dozen. If the eruption is acute, the patient must be forbidden to expose himself to any of these agents until the acute stage is past, and then be tested to determine the actual one at fault. When the acute stage is past, the patient is asked to bring to the office all the materials under suspicion and he is patch tested with them. It is necessary to determine the exact vehicle and concentration to be used if the substances are chemicals. This information can best be found in the book *Dermatologic Allergy* by Marion Sulzberger, Thomas Publishing Company. Of course, if the suspected substances are those of every-day

use they can be applied "as is." It is well also to test with remedies which one plans to use in future treatment.

The technique of the patch test is very simple. Adhesive tape, cellophane, and a proper dilution of the suspected agent in its proper testing vehicle, are all the equipment needed. The material is placed on a one-fourth inch square of moistened white linen covered with a three-fourth inch square of cellophane, and sealed to the skin with a one and one-half inch square of adhesive tape. Clothing materials may be merely cut to one-fourth inch square, moistened and applied without the linen square. These patch tests are left on the skin for forty-eight hours and then removed. Ten minutes is given for tape reaction to subside and then the test sites are inspected. A positive test has redness, papulation or vesiculation according to the degree of reaction. The plant oil tests need not be covered.

There are several precautions to be observed in patch testing (1) **never** patch test a person with an acute or spreading dermatitis; it may cause a generalization, (2) never test a woman on a site where a severe reaction might leave a cosmetic blemish, (3) always warn a patient to remove a test at any time when it causes discomfort—this warning may prevent an ulcer and scar, (4) always try to predetermine adhesive tape sensitivity, (5) always be sure the material is not a primary irritant in the concentration employed.

The treatment of the eruption itself requires some skill and judgment. The watchword in dermatology is "always soothe an acute dermatitis." Never apply an ointment to a surface that is acutely inflamed or weeping. Ointments are occlusive, prevent drainage and "keep heat in." With the exception of the scalp, ointments are rarely used on hairy areas, because they frequently cause pustules to form. In acute, highly inflamed or weeping conditions the wet dressing is the sovereign remedy. This wet dressing can be made of normal saline, saturated solution of boric acid or Epsom salts, one ounce to the quart. If there is secondary infection potassium permanganate, 1:5000 or silver nitrate 1/8% may be used. It is needless to say that a wet dressing should be kept wet. In widespread acute dermatitis all these agents may be used as baths for twenty minutes several times daily and a powdery lotion used between times. Linit starch, unscented, one pound to the bath, is particularly clean and pleasant to use.

For ambulatory cases with less acute eruptions a calamine type lotion is the remedy of choice. An alcoholic powdery lotion dries faster and is more pleasant to use, if the alcohol does not cause too much burning. In cases where the drying effects of a lotion may cause fissuring, that is, about some joint, a paste may be bandaged on. A paste is best made with fifty per cent by weight of equal parts of zinc oxide and plain talc in petrolatum, that is, one ounce each of the powders and two ounces of the grease. Pastes must be reapplied at least twice a day or they will dry and cake. When the eruption is subacute or chronic an ointment or paste containing salicylic acid, crude coal tar, sulphur, ammoniated mercury, or resorcin in two per cent to ten per cent concentrations are the remedies of choice. Any of the aforementioned remedies may have various antipruritics added. The most efficient of these are menthol $\frac{1}{8}\%$ to $\frac{1}{2}\%$.

phenol $\frac{1}{8}\%$ to 1% , and benzocaine 3 to 10% . Benzocaine should be used carefully as it is a frequent cause of irritation. All remedies are best removed by warm water or mineral oil and cotton or during the colloid bath. Soap is poison to these eruptions.

Recently a valuable preseasonal hyposensitization procedure has been advocated by Shelmire for various types of plant dermatitis. In this treatment the patient begins some four months before his anticipated exposure to poison ivy or other plants with oral administration of the plant oleoresin in corn oil, in gradually increasing dosage. The early reports justify its use.

If there is one thought that I should like to leave with you, it is that many more cases of dermatitis are cured than diagnosed. If purely soothing, innocuous remedies are used, the patient will never be made worse and his undiagnosed eruption will frequently be cured.

CLINICAL MANIFESTATIONS OF PROSTATIC DISEASE WITH SPECIAL REFERENCE TO ITS TREATMENT BY TRANSURETHRAL PROSTATIC RESECTION *

CHARLES S. PADDOCK, M. D.
Fayetteville

General Considerations

Manifestations of prostatic disease are varied and are often misleading, especially in the upper brackets of the life span, because they are so closely associated with senescent changes taking place in other organs of the body that the true seat of pathology is overlooked. All too often the prostate is given little consideration and attention is focused on the secondary effects. Because of this we see old patients going from one clinician to another for relief of high blood pressure, backaches, generalized weakness, chronic fatigue states and other symptoms far removed from the prostate gland who have never been given a complete urological examination. Because the symptoms present are often remote from the gland itself such as uremia, faulty vision or memory defects, or a cardio-vascular renal syndrome, we are often misled. The prostate gland, though small and secluded is a none the less potent factor in our human economy. We know that obstructive uropathy resulting from pathology in the prostate is the most frequent cause of urinary difficulties in man, and that it is often overlooked. Several factors contribute to this apparent diagnostic snub. We

know that the insidious onset usually extends over a long period of time and that a "weak" bladder is often considered a natural consequence of old age in men. Frequency, forcing to start the stream, and terminal dribbling, are often ignored as long as urine can be forcibly expelled. The secluded anatomical position the prostate occupies in the body likewise causes the examiner to give an incomplete examination and the elevated blood pressure and trace of albumin in the urine is often considered a mild nephritis. Then, also, the patient is at fault sometimes due to fear, ignorance or timidity, and this results from the general belief that trouble with the prostate in later life is a result of venereal disease in earlier life. This we know is definitely not true and the sooner the public corrects this error, the sooner there will be less procrastination on the part of these unfortunate sufferers. Obviously, the timid senile patient does not want skeletons in his closet of younger and more salubrious days brought out to rattle and to chagrin him in his dotage, and this popular unfounded belief of direct cause and effect between venereal disease and prostate gland trouble is a vicious and dangerous misconception. Also, some patients fear the dangerous operations of the past that their friends have endured,

* Read before the Sixty-seventh Annual Session, Arkansas Medical Society, Hot Springs National Park, April 28, 1942.

if indeed, they survived after a long and stormy surgical journey as was the case until a few years ago.

The Role of Prostatism

Let us think now of the anatomy of the gland. We see that it is composed of five lobes which completely encircle the urethra and lie anterior to the bladder and have associated glands that extend back under the floor of the bladder. It is then easy to envision this tubular urethra being compressed when the glandular elements of the prostate undergo hyperplasia, causing an obstruction to the normal outward passage of urine, resulting in a damming back into the bladder. This latter organ tries to overcome the increased resistance and therefore hypertrophies, just as the heart muscle does when overworked. After a time the bladder becomes unable to meet the double handicap of overcoming the gradually increasing resistance out in the urethra, plus the increasing amount of residual in the bladder, and it dilates. Then its mucous membrane develops trabeculations and sometimes sacculations. This increased amount of urine lying in the bladder causes increased pressure in the kidney. Thus we see the relationship between vesical neck obstruction and impaired kidney function. Fortunately, a kindly and understanding Mother Nature often intercedes, hanging a red light on the urological tract in the form of an acute retention which demands treatment.

Pathology

Prostatism may be defined as a urinary difficulty arising from an obstructive lesion at the bladder outlet. Senescence is usually associated with atrophy and in the prostate we see an atrophy of the cellular elements of the gland but the glandular elements undergo a true hyperplasia. Prostatic pathology tends to fall into definite age groups and might be classified as acute inflammatory, such as we see in youth; then there is the fibrous pathology we see in mid-life, and then the hyperplastic and neoplastic pathology we see in the older group. The first, or inflammatory group embrace the young lochinvar who presents himself at your office with a sense of pressure and burning in the rectum, difficult and incomplete urinary attempts—a prostatic abscess—a result of over zealous or ill-performed local treatment to an acute Neisserian infection. Also, in this youthful group is seen posterior urethritis and verumontanitis which, on cystoscopic study, show a spongy, bloody, succulent prostatic urethra as a result of sexual excess or masturbation. Then

in the middle age group we encounter the fibrous type of pathology, which is a non-venereal and represents the first sign of gray hairs in the prostate. These take the form of either the median bar type of obstruction or of a "pre-fibrosis" and are a result of periurethral inflammation. These are characterized by occurring at an earlier age than which we usually ascribe to prostate trouble, and there is usually little if any residual urine in these cases; the symptoms being more of nocturia and frequency. They usually show sacral backache and often there is "prostate consciousness." It is in this group that we see sexual weakness in the form of weak erections and premature ejaculations. The hyperplastic type of pathology or true enlargement of the gland, usually referred as hypertrophy is a true glandular hyperplasia, and there is deposited in the stroma of the gland small white nodules, which converge, form a mass and become surrounded by a false capsule. In this the urethral glands are involved, not the tubules, as was once considered.

The Prostate as a Focus of Infection

It has been stated by Wesson (1) that 72% of men having focal infection symptoms have infected prostates. It may be a landing spot for infection from teeth, tonsils, sinuses, etc. He also states that 80% of low backache in men is due to prostatic infection and seminal vesicle infection, and that the degree of infection is not proportional to the amount of pain. Symptoms often point to other organs due to sensory impulses originating in the prostate, passing to the pelvis plexuses, then through the hypogastric plexus or so-called pre-sacral nerve, and upward along the sympathetic nerves which follow the aorta and in this way may follow the splanchnics to the stomach, or go higher, and cause symptoms that are attributed to the heart or lungs.

Symptoms of Prostatism

The symptoms are manifested both locally and constitutionally. Among the leading local symptoms are nocturia (from reflex irritability of the enlarged nodule acting as a foreign body), and from congestion. Then there is urgency, due to an irritated bladder, as a result of infection from the stagnant bladder urine. There is hesitancy in starting the stream because the delicate detrusor mechanism is impaired. Prolonged urination and loss of propulsive power also result from weakness and the trigonal muscles cannot open the disabled, thickened external sphincter; there is then dribbling as a result of this weak external sphincter. We see now grad-

ually increasing residual urine due to thickening and elevation of the bladder outlet. Hematuria is sometimes seen as a result of congestion or infection. Acute retention, the climaxing symptom, and all too often the first symptom that makes the patient seek relief, then becomes present. These urinary retentions are termed "acute" but in reality they have had their groundwork laid over a period of years. There are also constitutional symptoms which are dependent on impaired kidney function and we see chronic uremia. There is generalized weakness and often nervous manifestations such as tremors and poor muscular coordination. Memory and visual defects are often present and often there are alterations in the blood picture. This latter takes the form usually of a secondary anemia. The white blood cells are usually not increased because of lowered resistance and there is a resulting absence of leucocytic response. The diastolic or systolic blood pressure is often likewise altered.

The psychological manifestations deserve attention. In the man of middle age there is often an inferiority complex, engendered especially by his sexual weakness with his marital partner. We are all familiar with the defeatist complex and resigned apathy of the senile patient and they present a pitiful sight of hope abandoned.

Examination of the Prostatic Patient

The examination should begin with a painstaking history of the onset and sequence of symptoms. Then too they should have as complete a general examination as time and conditions warrant, remembering that foci in far removed areas as teeth, sinuses, gall bladder, intestinal pathology should all be looked for. Information may be obtained by observing the urinary act. Then the rectal examination should be done with the patient in the proper position of either knee-chest, or with the feet apart and legs straight and his body bent over. The tone of the rectal sphincter should be the first thing noted in the rectal examination and much information can be obtained as regards latent syphilis in the case of the relaxed rectal sphincter. The prostate should be gently palpated and information gained as to size, shape, mobility, consistency, fluctuation, or areas of hardness, and the seminal vesicles should be palpated if enlarged, and stripped and some prostatic and the bladder should be catheterized to determine vesicular secretion obtained and studied.

The instrumental examination is then in order to determine the amount of residual urine and the bladder capacity. Cystoscopy cannot be routinely

carried out but should usually be done to determine the location and size of the hypertrophy, the tolerance of the urethra to instrumentation, and to learn the condition of the bladder. X-ray study of the bladder in the form of cystography or by a flat film of the kidneys, ureter, bladder and pelvic bones gives further information as to bladder distortion, calculi or malignant metastases.

Kidney function tests such as phenol-sulphonphthalein, indigo-carmin, Mosenthal concentration diuresis test and total volume should invariably be carried out to determine the degree of damage already done and the potential reserve of the patient as an operative risk.

The laboratory occupies an indispensable position in the evaluation of the prostatic from the standpoint of blood chemistry and other studies and valuable data is obtained and should never be omitted. These should include studies of non-protein nitrogen, urea, creatinine, blood Wassermann, blood sugar, coagulation and bleeding time. The information gathered from all these types of examination furnish us with a well grounded impression of the degree of damage that has taken place, and gives us a more secure footing on which to base our treatment and prognosis.

Treatment

In the first group or that of inflammatory etiology we have first to clean up all foci of infection. There may be an old seminal vesiculitis that has been harboring infection or there may be strictures of the prostatic ducts or spongy or unhealthy veru and dilated prostatic ducts which would require shrinking through topical applications of silver nitrate through a urethroscope. The prostate may be edematous or spongy, interfering with proper circulation and drainage of the gland, and in this type benefit will be obtained by massaging the prostate on a full bladder by first gently passing a catheter of small calibre (after first cleaning meatus with an antiseptic solution as 1:1000 mercury cyanide held on the glans penis for five minutes—then instilling a topical anesthetic as 2% Metycaine solution or Diothane solution of 1% strength and retaining in urethra for five minutes with the aid of a penis clamp). The bladder is then emptied by catheter and filled with 1:5000 potassium permanganate solution; the catheter then being slowly withdrawn until the flow stops abruptly and then the catheter is in the prostatic urethra between the internal and external "cutoff" muscles. Now an injection of some solution such as freshly prepared 10%

argyrol is injected about two drachms, and then the catheter is quickly removed. The prostate should then be gently massaged, the rationale being that the deep instillation in the prostatic urethra is forced into the prostatic ducts and seminal vesicles thereby reaching the seat of the pathology. The patient is then instructed to void. These should be carried out at weekly or twice weekly intervals for six or eight weeks. In the case of the cystic verumontanum fulguration one time will usually effect a cure.

In the pre-fibrotic type fulguration of the bladder neck usually gives early and complete relief.

In the true hyperplastic group the toilet of the bladder should be improved by urinary antiseptics and forcing of fluids to four litres per day. Strictures of the urethra should be removed by electro cutting or cold knife. Often a pin-point meatus will be found to cause increased intra-vesical pressure and is easily enlarged by cutting and is repaired by a suture on each lateral wall of the cut. Sexual and alcoholic excesses should be avoided. Any foci of infection elsewhere in the body should be corrected. Dietary adjustments often need to be made and usually large doses of vitamin B complex will improve these patients. Constipation should be avoided and large amounts of water plus minor dietary adjustments will usually do this. Hormone therapy is used by some with doubtful benefit. Its true status is not known well enough to offer much promise except in a limited number of well selected cases. For the true enlargement of the gland that requires surgical aid we can do either enucleation of the gland by the suprapubic or perineal route or by the newer method of transurethral resection which will be dealt with in detail in the forthcoming slides.

Transurethral Resection

As you all know it has only been in recent years that prostatic surgery has gotten away from the frightful mortality that formerly accompanied any attempt at surgery on the prostate. This reduction in mortality is due mainly to two factors: first, that as our knowledge of the role of the gland has increased we have come to regard the enlarged prostate from the standpoint of the whole organism rather than from the local pathological process. Also contributing to this great reduction in mortality is the newer operation of transurethral prostatic resection. This latter method is in contradistinction to the suprapubic route whereby a large incision is made in the abdomen and the entire gland is removed. This usually requires

two separate operations and an average hospital stay of four to eight weeks. The transurethral method, on the other hand, has an average of ten days in the hospital from admission to discharge, requires no cutting of the skin, and has a mortality rate of from 1% to 4% in experienced hands. In addition these patients are always dry and comfortable and have very little, if any, pain. It is not a crippling operation and does not destroy sexual function. The anesthesia required is usually caudal or spinal.

The operation is done by passing an instrument resembling a cystoscope into the prostatic urethra and under constant vision the portion of the gland that encroaches into the urethral canal is cut away in small fragments resembling pieces of spaghetti. This is done with a loope which is controlled by a ratchet on the instrument and is activated by a cutting current machine. In the words of one of its pioneers, Dr. J. F. McCarthy (2) "the philosophy of the procedure is that we are dealing with a more or less tubular structure into the lumen of which irregular encroachments are projected and for the proper restoring to normal this encroaching tissue must be removed in small pieces. The operation is for the man well trained in the way of prostatic surgery and is highly technical—the choice of this method deserves deliberate investigation and judicious evaluation."

In conclusion, it should be the duty of the physician to more closely scrutinize and evaluate the symptoms of individuals in the prostatic range of nocturia, hesitancy at the onset, feeble and prolonged micturitional act, terminal dribbling and residual urine. It is well to remember that elderly men do not regard nocturia of much consequence. If you ask them if they have any frequency they usually answer in the negative, but if you ask them if they had to arise last night they may answer, "Yes, three or four times, as is my custom." If these patients could be made to realize that their trouble will only get worse, that prostatic massages cannot possibly give any real relief, that early operation means a less dangerous operation, then much can be promised them in the way of complete relief with no interference of bladder nor sexual functions and in the twilight of their lives they may enjoy a beautiful sunset, unmarred by physical discomfort.

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THE PROCUREMENT OF PHYSICIANS *

"On June 8, I described to the American Medical Association at its Atlantic City meeting the acute need for physicians for the military services. I pointed out how far the recruitment of physicians lagged behind expected quotas. In conclusion, I stated bluntly the fact, which could not have been evaded by any analysis, that unless voluntary recruitment progressed more rapidly some more rigorous form of selective service must be resorted to.

"Those facts were necessary in order to permit the medical profession to diagnose its own case. And the case is urgent; physicians are members of what is probably the most indispensable of all professions. Despite the harshness of the facts and the bluntness with which I had to state them, I felt that the profession should be informed.

"In fairness to the recruitment record of many of our states, it seems in order at this time to give the profession some further idea of how its problem is distributed. The failure of a sufficient number of physicians to volunteer for military service is not spread thinly over the whole country. There is an acute lag in certain populous states. Other states have supplied nearly all that they should supply.

"We need more than twenty thousand additional physicians by the end of this year. But eight states—New York, Illinois, California, Pennsylvania, Massachusetts, New Jersey, Michigan and Ohio—should account for nearly sixteen thousand of that shortage.

"By contrast, sixteen states have fewer than a hundred physicians to go to reach the total number they should supply. In order not to deplete unduly available medical service in those areas, we are asking that the Medical Officers' Recruiting Boards be withdrawn and that further enlistments from those areas be then discouraged except in the case of the men under 37 in the urban areas. Those states are Alabama, Arizona, Delaware, Idaho, Louisiana, Mississippi, Montana, Nevada, New Mexico, North Dakota, South Carolina, South Dakota, Utah, Vermont, Wyoming and Virginia.

"The acute problem for the next few months for those states is an equitable distribution of medical service within their borders. This will

avoid the necessity for any consideration of plans to allocate doctors from other states to meet civilian needs.

"More than one hundred and thirty thousand physicians have returned their registration forms to the Roster for Scientific and Technical Personnel. Those forms are now being processed. When that work is complete we shall be able to give the profession a more comprehensive report on the relation of available medical service to wartime needs.

"The seriousness of the deficit in the number of physicians available for armed forces should not be under-estimated. The need must be met. It will be met by one method or another. Neither must we under-estimate the serious drain this puts on available medical services in civilian communities. It will mean long hours and hard work—sacrifices which will multiply the deep debt that every community owes to its physicians.

"It cannot be met simply by multiplying hours of the physicians who are left. There will be a real need to exercise every possible means for minimizing unnecessary medical services in order that the real needs may be met.

"It is my belief that the lag in recruitment has been due chiefly to the fact that the individual physician has not realized the genuine urgency of the need. Measures must be taken which will bring those home to every individual. This means that there will have to be some education of the general public. Preventable illness must be reduced to a minimum. Unreasonable demands on the physician's time must be reduced to a minimum. Thus only may available medical service adequately cover the needs."

An editorial in the same issue of The Journal says:

"Elsewhere in this issue appears a statement by Mr. Paul V. McNutt, chairman of the War Manpower Commission, under which the Procurement and Assignment Service for Physicians, Dentists and Veterinarians functions, relative to the urgent need for physicians for the armed forces at this time. Mr. McNutt recognizes the indispensable character of the physician for both military and civilian needs. He makes clear that eight states—New York, Illinois, California, Pennsylvania, Massachusetts, New Jersey, Michigan and Ohio—must supply most of the physicians needed for the armed forces at this time. Some of the states have already supplied so many physicians in proportion to their total medical population that recruitment in those states is to be discontinued now or in the near future.

* Reprint of Statement for The Journal of the American Medical Association by Paul V. McNutt, Chairman of the War Manpower Commission, as published in the June 27th issue, and Editorial in the same issue.

"The medical profession cannot be accused of failure to play its part in any way in relationship to the war effort. Everyone who is participating in the recruitment of physicians recognizes that there have been what are now called innumerable 'bottle necks' to be cleared away from time to time as the effort has progressed. More than one hundred and thirty thousand physicians have already returned the registration blanks sent out by the National Roster of Scientific and Technical Personnel. These replies have been coded, and punch cards have been made for them. Any physician who has failed to receive an enrollment form from the National Roster should write at once to the National Roster of Scientific and Technical Personnel, in care of War Manpower Commission, 916 G Street Northwest, Washington, D. C., requesting that an enrollment form be sent to him.

"Shortly there will be sent to every physician who indicated that service in the United States Army Medical Department would be his first choice or his second choice a letter as follows:

WAR MANPOWER COMMISSION
Procurement and Assignment Service
Washington

Procurement and Assignment Service for
Physicians, Dentists and Veterinarians

Dear Doctor:

You have indicated your willingness to serve the Nation in this great emergency. The Procurement and Assignment Service of the War Manpower Commission now calls on you to enter the Service. Please apply at once for a commission. You have been selected from among the available physicians in your community by a process that is believed to be fair and impartial.

Complete and mail the enclosed post cards immediately. The Office of the Surgeon General or his representative will provide the necessary application forms and authorize the time and the place for your physical examination.

Do not take any definite action regarding your practice until you receive specific instructions from the War Department. Each physician who is commissioned is routinely allowed fourteen days to wind up his affairs after receipt of orders from the War Department.

The rapidity of recruitment now in effect makes this communication necessary and requires your full cooperation. Please do not delay.

Sincerely yours,
Frank H. Lahey, M. D.,
Chairman, Directing Board,
Procurement and Assignment Service.

Enclosures
No. 92 6-22-42.

"With this letter will be enclosed two postal cards, which will secure prompt action in relationship to the receipt of application forms and proper notification of the action taken in the responsible agencies in Washington.

"The needs of the armed forces for physicians are immediate; unquestionably those needs will

be met. Physicians who are under 37 years of age and who have been classified by the Selective Service are acceptable to restudy of their situation and reclassification as these needs become more and more urgent. The medical schools, hospitals, public health departments, industrial concerns, in fact every agency utilizing the services of physicians, must cooperate by restudying the men classified as essential, so that only those who are actually essential in the most restricted sense of that word will be retained. All others must be made available as needed for the service of the nation in the armed forces.

"The Procurement and Assignment Service for Physicians, Dentists and Veterinarians was established to aid in the proper assignment of physicians in times like these to the tasks for which they are best fitted. Already this agency has been of immense value in the principles that have been adopted relative to the maintenance of medical education, hospital service and civilian health, as well as the study and evaluation of men for the Army and Navy medical departments. As the needs become more acute and the number of men available less, their task assumes increasing importance. The War Manpower Commission is now the agency under which the Procurement and Assignment Service functions. Through the activities of various subcommittees such problems as maintenance of essential staff members for hospitals, the determination of adequate medical service for the civilian population needs, of adequate personnel for urban, county, state and national health departments and the needs of industry are being given special consideration. The medical profession, as Mr. McNutt has repeatedly emphasized, has in these activities shown the way to scientific study and allocation of manpower in this emergency."

COMMUNIQUE

Hendricks Field, Florida,
July 6, 1942.

To the Editor:

Greetings. Have some recent clippings from the Arkansas Gazette relative to FSA proceedings. Looks as if trouble is nearing. Sorry I cannot be there to help fight it off. However with Joe Shuffield and Clyde McNeil on the job, I know it will be handled very effectively.

Have a nice post assignment here but since we are in the interior, it is hot as the devil except when the daily shower comes.

Good luck.

F. A. Corn.

TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

RETURN of the arrested case of tuberculosis to his safe and full economic efficiency is the final objective of treatment. This aspect of care of the tuberculous, however, has received far too little thoughtful study. Fifty per cent of patients discharged from sanatoria still die of tuberculosis within five years. This social waste must be stopped. Dr. Aitken calls attention to the need of a more scientific approach to the problem.

WORK TOLERANCE FOLLOWING TUBERCULOSIS

The original purpose of a sanatorium was largely the segregation of a patient with an infectious disease dangerous to his neighbors. Enough bacillary cases were cured or arrested through rest, fresh air, proper food, to encourage the development of sanatoria for the "early case" which held good hope of cure. Refined methods of diagnosis soon showed that the minimal case was a rarity and that prolonged bed rest was nearly always essential. This principle is still valid even with the introduction of collapse therapy as an effective form of treatment. The criticism arose that we were making healthy loafers out of sick workers and it was too often justified.

Thereupon, occupational therapy crept in to relieve the tedium of enforced idleness and then followed a more constructive approach known by the awkward name of rehabilitation which included education and vocational training. Treating the disease while the patient is an invalid in the hospital is no longer considered sufficient. Adequate care involves preparation for maximum social and economic adjustment when the disease is arrested or apparently cured.

This duty devolves upon the sanatorium. "As soon as an estimate of the disease processes is arrived at and the course of treatment decided upon, a beginning can be made in education. An early analysis of the patient's educational and occupational background, of his interests and aptitudes can be made and a course of training outlined. This can be made to synchronize with his medical treatment and other activities permitted, and it can be carried throughout the full length of stay of the patient in the sanatorium. As well, there are many of the facilities of the

sanatorium which can be used for both training and physical rehabilitation. All the program requires is the coordination and cooperation of the various staffs of the hospital and occupational therapists who are willing to accept adult education as being a branch of occupational therapy.

"The appraisal of the ability of the individual to do some line of work begins with securing past-work history and continues throughout the period of training. Also the counseling of the patient and testing for special aptitudes by trained observers aids in appraising. It not only helps evaluation but it gives direction to effort, eliminating much time wasted by trial and error methods, and is most useful in creating interest and cooperation in patients."

Appraising the physical stamina of the patient to stand the strain of normal life is difficult. We have no clinical or mechanical tests to use as reliable measures of work tolerance. We cannot say just how many foot pounds of muscular energy this individual can safely expend, nor how much mental strain he can endure without reactivating his disease. Furthermore, our knowledge of just how much energy a given job requires is but vaguely known. Job analyses are usually made on the basis of speed rather than foot pounds of energy required.

Our present recourse, then, is the study of the patient as an individual during his stay in the sanatorium. Close observation will give us an appraisal of his inherent resistance to breakdown from physical effort, nervous upsets, or even intercurrent infection. With the knowledge thus gained the trial method of graduated exercise should be undertaken with careful watching. "Signs and symptoms of intoxication indicate

over-exertion and need for return to rest therapy. Rise in temperature, increase in pulse rate, fatigue and loss of weight, sputum changes in quantity and content, changes in sedimentation rate and blood count and later increase in pathology as shown by X-ray, suggest reactivation.

"In order to establish with more surety that a patient can withstand sustained efforts, a period of physical rehabilitation should be followed before discharge of the patient. Before it can be certain that the patient can lead a normal life and stand up to ordinary work conditions, sanatorium routine and cure hours should be broken. One of the hardest things for a patient is to discontinue the mid-day rest period. If he can be put on a full work schedule of forty hours a week for a few months before discharge and is able to play after work without undue fatigue, he should be able to do the same outside. This can be readily done in a sanatorium where there is a constant need for help and often to the advantage of the sanatorium."

In addition to the graduated exercise, test inferences may be drawn from X-ray studies of the characteristics of the disease during treatment, such as a tendency toward fibrosis, rapidity of healing and such evidences of good resistance. On the other hand, very extensive disease with reduced vital capacity, distortion of chest structures and possible cardiac embarrassment are obvious causes of low work tolerance.

In connection with its rehabilitation program, for over ten years Niagara Sanatorium (New York) has given close study to the problem of determining work tolerance. While only about half the patients are considered to afford hope of effective vocational rehabilitation, careful study is made of every case since whatever occupational therapy is possible is employed routinely. Patients have been given aptitude and personality tests by personnel from the National Tuberculosis Association and the State Rehabilitation Department has made provision for the completion of courses in a number of cases.

Only modest claims are made for the results thus far achieved. "It is true that the death rate in the sanatorium has remained unchanged, but the readmission rate has decreased, as have deaths of patients after discharge. This decrease in readmissions counterbalances the increased initial length of stay. Of fifteen patients who have been aided by state rehabilitation, only one has since broken down and this was the result of lobar pneumonia in a patient with a complete thoracoplasty. As well as the evident individual results we have obtained, the morale of the en-

tire population has improved. Few patients leave now because of boredom. Also, it has given us an employment agency, not only for temporary help but for permanent employees who have been tried and their ability proved. Some of our most valuable employees are ex-patients, trained in the peculiarities of our set-up and most valuable in that they carry with them the patients' viewpoint and an understanding of patients' trials and tribulations.

"To summarize, a rehabilitation program can be developed in a small sanatorium with benefit to patients individually and collectively and with advantages to the sanatorium. Tolerance for selective work can be built up in patients, but the evaluation like that for determining disease status, being dependent upon personal judgment of the significance of the individual's reactions, is only approximate. The program can be carried on at no great cost to the community and over a period of time the community, as a whole, will be repaid many times over."

The Need for Developing Work Tolerance Following Pulmonary Tuberculosis, A. M. Aitken, M. D. Paper given at annual meeting of National Tuberculosis Assn., Phila., Penna., May 6-9, 1942.

SAVE INDEPENDENT MEDICINE

We do not hear much agitation for socialization of medicine these days. Our system of private medicine has been responsible for so many great achievements that demands for revolutionary changes are not given the support of thinking people.

However, proposals are occasionally made which, though they may seem superficially sound, would extend a measure of political control over medicine which would pave the way for socialization or regimentation of the doctor at some future date.

A recent example of that is found in the proposal that the Social Security Laws be broadened to make health insurance compulsory for all workers and their families.

If this proposal were made into law, the doctor would have to look to the insurer, a branch of Federal government, for much of his livelihood. The insurer would determine the fees which he might charge and that, in turn, would determine the amount of time he could give each patient. The future of all doctors would depend, in part, on a bureau whose policies and personnel are directly affected by the ever-changing tides of politics. And, most important by far, if compulsory sickness insurance became a national policy, the logical next step would be the passage of a law making everything concerned with public health a function of the state. And that would be nothing more or less than socialized medicine.

If private medicine had failed, a case could be made for this. But the plain truth is that America has been a world leader in care of the sick and in medical discovery. The man with little or no money can command the finest medical talent, and the most famous doctors give much of their time to patients who cannot pay. What valid reason can there be for disrupting a system which has given the American people the finest average health on earth?—Cross County Times, Parkin, June 11, 1942.

The President's Page

"OUR STATE HEALTH DEPARTMENT"

The physicians of Arkansas became interested in the establishment of a State Board of Health about 1910. A committee was appointed to look into the matter and draft a law, and a bill was introduced in the Legislature of 1911 to create the Arkansas State Board of Health. History states that, the physicians not being well-versed in politics, this law failed to pass. Having profited by this educational experience, the physicians again introduced a bill in the 1913 session of the Legislature, which did pass and became Act 96, creating the Arkansas State Board of Health.

The act provides for a State Board of Health composed of seven members, one from each congressional district, all of whom must be physicians and graduates of reputable medical schools, having practiced medicine for a period of seven years immediately preceding their appointment. The Board was empowered to appoint a secretary, who is known as the State Health Officer, and is the executive officer of the Board.

The first appropriation amounted to about \$9,000, and the State Health Officer and two clerical assistants in the Bureau of Vital Statistics made up the personnel.

Following the disastrous flood of 1927, attempts were made in establishing county health units, in order that direct service to the people might be rendered in the control of epidemics and the promotion of a general program in sanitation and hygiene.

Normally, the personnel now numbers over three hundred, consisting of about 45 full-time doctors, 130 full-time public health nurses, six full-time sanitary engineers, 20 technically trained laboratory personnel, with county sanitarians and clerical help, along with specialists in milk and dairy products and industrial hygiene, making up the balance of the force. Unfortunately, because of the war and the call to service of so many of our professional and technically trained people, the Board is now operating with a skeleton force, more or less, and the present indications are that it will be even smaller within the next six months.

Statistics show a gradual decline in all communicable diseases, especially those prevalent in the South, such as typhoid, malaria, and the dysenteries.

Since the Arkansas State Board of Health is a child of the Arkansas Medical Society, the present State Health Officer and his personnel work in close cooperation with the practitioners in the organization and development of its program.

We are very proud of our State Health Officer, Dr. W. B. Grayson. He has the respect and confidence of the membership of the Arkansas Medical Society.

R. B. ROBINS, President.

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EDITORIALS

INFORMATION FOR PHYSICIANS ENTERING MILITARY SERVICE

The Journal presents in condensed form pertinent information for those members who are entering the military service at this time.

Narcotic License

The Collector of Internal Revenue has advised that medical men on active duty with the armed forces need not renew their narcotic permits until they return to private practice. If they will inform the Collector of Internal Revenue, Little Rock, of the change in their status, their names will be placed in a special file and they will not be considered delinquent because of failure to renew. On renewal after duration, they will receive their old narcotic registry numbers.

Physicians who discontinue their registration are reminded that they are not permitted to prescribe narcotics for private patients nor to keep any of the narcotics in their possession. Supplies on hand, when they leave practice for active duty, may be transferred to another practitioner

(on receipt of a regular order form) or surrendered to the Internal Revenue Bureau.

Notification to Patients

Physicians entering military service may properly notify their patients that they are leaving the community for military service and it is proper that they give the name of a colleague to whom their patients are being referred during their absence.

Civil Rights and Obligations

Physicians desiring information as to civil rights and privileges of citizens entering the armed forces are referred to an article, "The Protection of Civil Rights of Persons in the Military Service," prepared by the Bureau of Legal Medicine and Legislation of the American Medical Association and published in The Journal of the American Medical Association, January 24, 1942, pages 306-307. This article reviews the essential features of the soldiers and sailors civil relief act of 1940, the purpose of which is to free persons in military service from harassment and injury to their civil rights during their term of military service.

Generally, this law provides remedies in the form of suspension of proceedings and transactions during the time a person is in military service only, when in the opinion of the courts, such person's opportunity and capacity to perform his civil obligations are impaired by reason of his being in military service.

Insurance

Because of variations in the clauses contained in the many life, accident and health policies, it is not possible to make general remarks. The physician should read his policies and seek the advice of a trained insurance man.

Registration of Property

In order to obtain a moratorium on interest and mortgage payments on a residence or office, the physician should have the property registered in his own name rather than in the name of his wife.

Malpractice Insurance

That a suit for malpractice may be brought against a physician while he is in military service is probably not realized by a great many physicians. Malpractice suits of this type are extremely uncommon, yet they may occur. Should suit be brought against a medical officer for

alleged malpractice in the performance of his official duties it is altogether likely that the defendant would have the case removed to a federal court and would be defended by a United States district attorney. Should the defendant lose the case and a judgment be secured, there is no legal provision whereby the government would pay the judgment.

It seems desirable, therefore, that physicians who are in, or who will enter, active military service, should bear this in mind and continue their civilian malpractice policies. In the case of those physicians who enter the service from hospitals, it is suggested that they obtain malpractice coverage.

Membership in Organized Medicine

For the years of 1941 and 1942, the Council has waived the annual membership assessment of those physicians who were in good standing for the previous year provided the member's county society waived the county assessment of membership. Whether this policy will be continued in 1943 cannot now be stated. The Society will experience a sharp loss in income from the entrance of a large number of members into active military service. This will receive the attention of the Council prior to January 1, 1943.

Members entering military service will help The Journal and the Secretary's office if they will promptly report all changes in address. It is hoped that The Journal will reach each member regularly. Failure to receive The Journal will ordinarily be due to failure to receive notice of change of address.

HISTORY OF THE ARKANSAS MEDICAL SOCIETY

All installments of the History of the Arkansas Medical Society as authorized by the House of Delegates and as furnished by a special committee from the Society have now appeared in The Journal. Predicated upon a sufficient response in advance subscriptions, the history will be printed in pamphlet form. Members wishing copies of the history are asked to remit fifty cents to the Secretary in payment of their copy. In the event that sufficient response is not obtained, type will be destroyed and no bound publication made, advance subscriptions being returned. Prompt remittance from those members wishing copies will permit early publication of the pamphlet.

PROCEEDINGS OF SOCIETIES

The Sixth Councilor District Medical Society met in dinner session at Prescott, June 22nd, for the following program: "Multiple Myeloma," O. C. Melson, Little Rock; "Medical Legislation," Jos. F. Shuffield, Little Rock; "Procurement and Assignment Service," W. R. Brooksher, Fort Smith; "Medical Officer Recruiting Board," Maj. Daniel H. Autry, Camp Robinson; "The Acute Abdomen," R. B. Robins, Camden; and "Urology in General Practice," H. Fay H. Jones, Little Rock. Don Smith, Hope, was elected president, and C. A. Archer, Jr., Prescott, was re-elected secretary.

The Southeast Arkansas Medical Society met in Lake Village, July 20th, the scientific program being furnished by Drs. Rawles and Garnier of Bastrop, Louisiana. S. W. Douglas, Eudora, discussed the procurement and assignment service.

The First Councilor District Medical Society met at Jonesboro, July 9th, for the following program: "The Acute Abdomen," R. B. Robins, Camden; "Medical Legislation," Jos. F. Shuffield, Little Rock; "Procurement and Assignment," W. R. Brooksher, Fort Smith; and "Medical Officer Recruiting Board Procedure," Major Daniel H. Autry, Little Rock.

COMMUNIQUE

June 18, 1942.

To the Editor:

Just a few lines to let my friends in the Arkansas Medical Society know where I am and to request that my copy of The Journal be sent to my new address. I am quite comfortable here overseas * and keeping very busy.

Shortly after my arrival I was promoted to the grade of Major and am the Regimental Surgeon for the 13th Armored Regiment.

Sorry I missed the meeting this year. I am sure that I will have some very interesting things to report at my next session.

Please give my best regards to all the fellows.

Sincerely,

John M. Samuel.

Major John M. Samuel,
13th Armored Regiment,
A. P. O. 251,

Care Postmaster, New York, New York.

* Censorship regulations prohibit publication.

PERSONALS AND NEWS ITEMS

The following have been commissioned medical officers, Army of the United States: Henry G. Hollenberg, Little Rock; Robert H. Jackson, Little Rock; Hugh Walter Savage, Little Rock; F. A. Corn, Jr., Lonoke; and Jett Otto Scott, Hot Springs National Park.

L. D. Massey, Osceola, has been commissioned Major, Medical Corps, Army of the United States, and assigned to Fort Sam Houston, Texas, for duty.

T. F. Hudson has been elected president of the Luxora Rotary Club.

G. F. Hollingsworth has accepted appointment as physician for Dyess Colony.

John W. Redman has moved from Mount Ida to Fort Smith.

S. M. Graves has moved from Mount Levi to Clarksville.

The following have been commissioned as medical officers, Army of the United States, by the Medical Officer Recruiting Board in Arkansas: C. Ray Williams, Morrilton; R. E. Smallwood, Hot Springs National Park; H. H. Atkinson, Crossett; J. B. Holder, Monticello; M. T. Crow, Warren; B. R. Teeter, Russellville; J. Q. Blackwood, Little Rock; L. S. Dunaway, Conway; Ralph E. Weddington, Batesville; C. N. Bogart, Forrest City; W. P. Ward, Fordyce; W. D. Easterling, Lake Village; W. R. Parsons, Little Rock; J. B. Futrell, Rector; W. L. Shippey, Fort Smith; W. A. Regnier, Crossett; C. A. Churchill, Batesville; J. J. Monfort, Batesville; W. L. Thompson, Little Rock; R. L. Taylor, Conway; Phillip T. Cullen, Little Rock; R. G. Young, Little Rock; C. M. Smith, Paris; and G. T. Johnson, Little Rock.

E. J. Munn, El Dorado, addressed a recent meeting of the Men's Fellowship Association at Smackover.

John M. Samuel, Little Rock, has been promoted to Major, Medical Corps, United States Army.

W. F. B. Williams has moved from Des Arc to Cotton Plant.

"Fusospirichetal Organisms and Tonsillitis," by James F. Lewis, Fayetteville, appeared in the April issue of Archives of Otolaryngology.

Hoyt R. Allen, Little Rock, has passed his examination as a diplomate of the American Board of Proctology.

C. H. Dickerson, Conway, attended Rotary International in Toronto during June and subsequently took postgraduate work at Cook County Hospital, Chicago.

L. C. McVay, Marion, recently addressed the West Memphis Rotary Club on "Early Practice of Medicine in Crittenden County."

Wm. H. Wilson has moved from Oxford to Griffithville.

E. R. King has been elected surgeon of the Ashdown post of the American Legion.

J. W. Butts and Geo. R. Storms have been elected surgeons of the Helena post of the American Legion.

J. J. Monfort, Batesville, has been called to active duty as Captain, Medical Corps, Army of the United States, and assigned to 107th Station Hospital, Fort Jackson, S. C.

R. L. Taylor, Conway, has been called to active duty as Lieutenant, Medical Corps, Army of the United States, and assigned to duty at Camp Barkley, Texas.

Edwin L. Dunaway, Conway, has been called to active duty as Lieutenant, Medical Corps, Army of the United States, and assigned to Fort Sam Houston, Texas.

W. M. Parker, DeVall's Bluff, has been called to active duty as Captain, Medical Corps, Army of the United States, and assigned at Army and Navy General Hospital, Hot Springs National Park.

Lt. B. Z. Binns, formerly of Monticello, has graduated in a course in aviation medicine for aviation medical examiners.

H. L. Brown, Malvern, has been elected secretary-treasurer of the Hot Spring County Medical Society.

D. A. Dickerson has moved from Caraway to Marked Tree.

H. King Wade has been elected president of the Hot Springs Chamber of Commerce.

J. Harry Hayes, Little Rock, District Governor, 7-B, Lions Clubs, installed new officers of the Camden Lions Club recently.

S. A. Thompson has been appointed chairman of the United China Relief campaign in Ouachita County.

J. C. Barnett, Heber Springs, has been called to active duty as Lieutenant, Naval Medical Corps, and assigned to Naval Hospital, Corpus Christi, Texas.

L. D. Massey, Osceola, has been called to active duty as Major, Medical Corps, Army of the United States, and assigned to duty at Station Hospital, Fort McIntosh, Texas.

W. P. Ward, Fordyce, has been called to active duty as Captain, Medical Corps, Army of the United States, and assigned to Station Hospital, Fort McIntosh, Texas.

Lt. Cmdr. Corydon McA. Wassell, Little Rock, was the honor guest of Little Rock's Heroes Day celebration July 17th.

W. L. Shippey, Fort Smith, has been called to active duty as Captain, Medical Corps, Army of the United States, and assigned to 92nd Station Hospital, Camp Robinson.

Lt. W. M. Woods, Huntington, is now in service overseas.

F. A. Corn, Jr., Lonoke, has been called to active duty as Captain, Medical Corps, Army of the United States, and assigned to Hendricks Field, Florida.

R. B. Robins, Camden, attended the Lions International Convention in Toronto during July.

Dr. and Mrs. W. F. Adams, Fort Smith, spent a recent vacation at Lake Hamilton.

"Cod Liver Oil Ointment With Sulfonamides in Wounds and Osteomyelitis," by S. J. Wolfermann and W. F. Adams, Fort Smith, appeared in Industrial Medicine for July.

C. G. Leverett has been elected junior warden of the Eudora Masonic lodge.

M. W. Chastain has been elected president of the Bentonville Rotary Club.

W. H. Abington has been elected surgeon of the Beebe post of the American Legion.

J. M. Kolb has been elected business manager of the Presbyterian Church at Clarksville.

RANDOM THOUGHTS OF THE SECRETARY

June 22nd. By air to Adams Field and thence again the guest of a beneficent Federal government and Major Autry to Prescott, the going trip occupied in its entirety with a clarification of the issues on procurement and assignment, a discussion which is apparently more amplified than clarified but which served to pleasantly pass the time away. The sixth district turns out in great numbers, a deserved tribute to the efforts of Al Buchanan and Hotel Loda does itself proud with fried chicken. Aboard the Memphis-Californian at Little Rock, 1:55 a. m., asleep before Biddle, arising at 6:15 a. m. out of Booneville and ready for the day ahead.

June 28th. Again the guest of Clyde McNeil and Ray, the carefully-picked driver, en route to Little Rock to confer on procurement and assignment, arriving early enough to again enjoy Sam and Henrietta Peck's clover leaf rolls at the Frederica. The business of the conference happily and speedily accomplished, we join the family for the return trip by rail and call it a day indeed well spent.

July 9th. Clyde McNeil and Rex Siegel evidence little interest in being travel companions, so we take off to cruise just over Siegel's country estate en route to Jonesboro crossing no more towns until Tuckerman where a silver water tower is a good guide post. Flying a line between Batesville and Newport we are able to enjoy the beauties of the White River country in a new manner. On into Jonesboro where the rest of the troupe, at the President's suggestion, have taken over our room awaiting dinner. The first district accords the travelers a cordial welcome and it would seem that much is accomplished. The success of these district meetings is encouraging and we feel that they may rightfully become annual occasions. The meeting adjourned, we take to our room, sleepily wishing Bob, Joe and Dan a pleasant motor trip home, glad that we may immediately go to bed and not, as is our almost invariable custom, head across the state for a good part of the night.

July 10th. A good Noble Hotel breakfast and we are away wondering how many Jonesboro folks have had the privilege of looking down on the Gulf-colored swimming pool in Community Center, a most inviting sight from 1,500 feet on a hot afternoon. Across Cash where we try to see McCurry and on into bad weather necessitating a southward detour towards Morrilton and thence to the home station in a driving rain realizing full well that rivers still serve the traveler, this time as a visible trail for one neophyte airman who has little faith in the compass and blind flying.

July 22nd. Comes Paddock from Fayetteville way with much of conversation and with an invitation to steak dinner over in Crawford County, all of which is accepted in the jovial spirit of the visitor.

July 24th. This evening with the Wolfermann's and the Captain Branch's for dinner where Wolfermann delights in recounting mortality case records from our personal irradiation files, a new habit of this confrere of ours most difficult to thwart.

OBITUARY

DRED R. DORENTE, age 63, formerly of Fort Smith, died at Ada, Oklahoma, June 17th. Born in Virginia, October 11th, 1878, he graduated from the College of Physicians and Surgeons at Dallas in 1907 and from the Chicago College of Medicine and Surgery in 1913. His practice had been solely at Fort Smith until ill health caused his retirement in 1931. In addition to his membership in the Sebastian County Medical Society and the Arkansas Medical Society, he was a diplomate of the American Board of Otolaryngology and a fellow of the American Academy of Ophthalmology and Otolaryngology and of the American College of Surgeons. Surviving relatives are a sister and a brother.

FRANK PRIOR HARDY, age 55, of Searcy, died June 22nd after a prolonged illness. Born at Social Hill, November 3, 1886, he graduated from the University of Arkansas School of Medicine in 1913, first practicing in Lonoke county, then at Center Hill, and moving to Searcy in 1938. Active in organized medicine, he was a member of the White County Medical Society, which he had served in several offices, of the Arkansas Medical Society and a fellow of the American Medical Association. He was a member of the Masonic lodge. Surviving relatives are his wife and a daughter.

RUFUS W. RATLIFF, Jonesboro, age 77, died June 23rd. Born in Kosciusko, Mississippi, he graduated from the University of Mississippi in 1885 and obtained his medical degree from the Memphis Hospital Medical College in 1900. He began practice at Jonesboro in 1903. In addition to his membership in the Craighead-Poinsett County Medical Society and the Arkansas Medical Society, of which societies he was elected an honorary member in 1937, he was a member of the Presbyterian Church. Surviving relatives are his wife and a son.

JOSEPH STEPHEN WESTERFIELD, age 90, died at his home in Conway, June 28th. Born in Laurel County, Kentucky, he graduated from Tusculum College, Greenville, Tennessee, in 1872 and received his medical degree from the University of Louisville School of Medicine in

1880. He first located at Greenbrier but moved to Conway in 1884, retiring from practice in 1933 after the death of his wife. He was a charter member of the Faulkner County Medical Society and had been its secretary for nearly 35 years. His service as secretary was interrupted for one year when he was the society's president. Active in Masonic circles, he had held various offices in the local lodges and was Grand Master of the Grand Lodge of Masons in Arkansas in 1911. He is survived by a daughter with whom he made his home, Mrs. Mary W. Hilliard.

LEON E. KING, age 33, Hot Springs National Park, died July 10th of pneumonia. Born in Wisilisky, Russia, in 1908, he came to the United States in 1926 and graduated from the Little Rock High School in 1928 and from the University of Arkansas School of Medicine in 1931. His internship was served in Little Rock and in Saint Louis. He was a fellow of the American Medical Association, a member of the Garland County Medical Society and the Arkansas Medical Society and a member of B'Nai B'Rith. Surviving relatives are his wife and a son.

JOHN HENRY WEAVER, age 84, Hope, the oldest practicing physician in Hempstead County, died July 15th following a major operation. Born in Laneburg, Nevada County, he graduated from the Louisville Medical College in 1881 and located at Hope in 1902. A member of the Methodist Church, he had served on its Board of Stewards for 39 years. He was an honorary member of the Hempstead County Medical Society and of the Arkansas Medical Society and a fellow of the American Medical Association. Surviving him are a son and a daughter.

BENJAMIN COMER ROUTON, age 29, Ashdown, died on a train en route home from Saint Louis, July 19th. Born in Hope, he graduated from the University of Arkansas School of Medicine in 1938, served an internship and residency at Saint Anthony's Hospital, Oklahoma City, and had practiced medicine at Ashdown since 1941. He was a member and director of the Ashdown Rotary Club. Surviving relatives are his wife and a daughter.

COMMUNIQUE

July 3rd, 1942.

To the Editor:

The June issue of The Journal of the Arkansas Medical Society came in today. It is certainly welcome out here as it gives us about all the news we get of the profession and the fellows back home.

As you've heard by now there has been a little excitement out here. The news is good so far. These Arkansas boys are ready for them.

Please send The Journal to the following address from now on:

Capt. C. L. Hyatt, M. C.,
Med. Detach., 153rd Infantry,
A. P. O. 948,
Seattle, Washington.

Send Capt. R. F. Hyatt's Journal to the same address.

Best regards from the medics here.

Louis and Bob Hyatt.

COMMUNIQUE

July 20, 1942.

To the Editor:

At last a place to stop for a while. Located at Station Hospital, Fort McIntosh, Texas.

Like it fine here. Every one has been very considerate and has tried to take care of me. They have told me what to expect and how to conform to military life.

The weather is very agreeable, cool at night and a breeze always during the day.

I find that the work is very interesting and much can be learned.

Should you take a vacation this way come by and stop with me. I live in the Hamilton Hotel,

Laredo.

Capt. W. P. Ward, Fordyce, is here also.

Sincerely,

L. D. Massey.

BOOK REVIEWS

Synopsis of Materia Medica, Toxicology and Pharmacology for Students and Practitioners of Medicine: By F. R. Davison, B. A., M. Sc., Ph. B., M. B., Medical Department, The Upjohn Company, Kalamazoo, Michigan. Formerly Assistant Professor of Pharmacology, University of Arkansas School of Medicine. Second edition. Pp. 695. 45 illustrations, 4 in color. Saint Louis: C. V. Mosby Company, 1942. Price \$5.75.

This is a worth-while desk guide on accepted drugs in which the author considers pharmacology as an integral part of medicine but that drugs with established therapeutic values only should be discussed. Emphasis has been placed on the practical applications of drug action.

Synopsis of Ano-Rectal Diseases: By Louis J. Hirschman, M. D., F. A. C. S., Professor of Proctology, Wayne University School of Medicine, Detroit, etc. Second edition. Pp. 315. 128 illustrations with 12 color plates. Price \$4.50. Saint Louis: C. V. Mosby Company, 1942.

This book represents a small concise work on ano-rectal diseases, and is in reality a synopsis of Hirschman's textbook on ano-rectal diseases. Several chapters have been rewritten since the first edition printed. There is one new chapter on focal infection of ano-rectal origin, a field which has been overlooked and neglected by a large element of the medical profession. Many illustrations have been replaced and several new illustrations, including color plates, have been added. The contents of this volume describe routine methods and techniques which have been found useful and satisfactory in an active proctologic experience which includes clinical as well as private practice. As in the previous edition, the requirements of the medical student, as well as of general practitioners of medicine, have been kept uppermost in mind, and technical details have been largely omitted except where absolutely essential for clarity and exactness.

The Neurological Hospital provides a complete diagnostic service for psychiatric and neurological patients, and utilizes modern methods of therapy such as insulin and curare-electric shock. Treatment programs are based upon total patient therapy from the standpoint of internal medicine, surgery and the other specialties, as well as the psychiatric and neurological symptomatology.

NEUROLOGICAL HOSPITAL

Twenty-seventh and The Paseo
Kansas City, Missouri

THE ROBINSON CLINIC

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PRIOR SHELTON, M.D.

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THE PROBLEM OF CEREBRAL PALSY AND ITS RELATION TO REHABILITATION AND PUBLIC HEALTH *

WINTHROP MORGAN PHELPS, M. D.

Baltimore, Maryland

In order to determine the extent of the problem of cerebral palsy a number of surveys have been made throughout various parts of the country to evaluate this condition in relation to the total problem of the handicapped. The material thus gathered is sufficiently complete in many areas, and the numbers of cases studied sufficiently large, to make it of statistical value.

First, as regards frequency of occurrence, it has been found that there are seven children born each year with one or another of the types of cerebral palsy in every 100,000 of population. Of these, one dies before the age of 6 years. Of the remaining six, two are found to be feeble-minded. The four remaining cases are of normal mentality. Roughly speaking, one of these four is very severe and usually home bound, one is very mild and will need little or no treatment, and the remaining two represent the treatable and most hopeful cases. It can be seen, therefore, that in a community of 100,000 if there are two treatable cases born each year, the total number under 21 years will be 42. There will be, however, in that community a total of six times 21 or 126 cases under 21 of which 42 are feeble-minded, 21 very severe, 21 very mild and the 42 mentioned above who will require treatment. In a community or state of 1,000,000 people these treatable cases will therefore number 420. Further statistics will show that the sex is about evenly divided and that the distribution in the various economic levels is the same. The percentage in the negro race is very small. There is no difference in percentage in either race in rural as opposed to urban populations.

Public Health

The problem of cerebral palsy relates to public health in regard to its control, and to re-

habilitation in respect to its treatment. Control of cerebral palsy demands a careful investigation of its etiology. Various studies, statistical and otherwise, have shown that a large percentage of the cases are congenital or prenatal in origin. It is of course manifestly impossible to arrive at actual figures since determination of etiology is at best presumptive. There is a second group in which injury at or around the time of birth is the cause, and a third group in which the condition is acquired after birth or at any time later in life.

Congenital Cerebral Palsy

The etiology of the first or so-called congenital group includes a wide variety of possibilities. There is a definite belief that defects in the genes or germ plasm may result in defects in the brain structure, and cases have been seen in which this seems to be borne out. One carefully performed serial section study of the brain at autopsy of a five-year-old athetoid girl of normal mentality, demonstrated complete absence of the basal nuclei. Defects of the cortex are more frequently seen but usually associated with congenital idiocy. There is also evidence which suggests that extreme alcoholism in the mother during pregnancy may sometimes produce cerebral palsy. This may be only in the presence of a kidney or some other lesion since it is certainly not always true. The toxemias of pregnancy are occasionally causative factors and vitamin and mineral dietary deficiencies play a definite role. A number of cases have been seen in which menstruation persisted throughout pregnancy and others in which premature separation of the placenta has been recorded as the only assignable cause. This is especially true when the separation was of traumatic origin from a fall or automobile accident. There is another group in which glandular disease—hypo-

* Read before the Sixty-seventh Annual Session, Arkansas Medical Society, Hot Springs National Park, April 27, 1942.

thyroidism or hyperthyroidism, Addisons Disease, pituitary disease and others have been suggestive as a contributory factor. These conditions in the mother have not however been consistent with regard to cerebral palsy in the child.

Birth Injury

The second group, injuries to the child at or around the time of birth, has received the greatest notice but it is far from proven that it is the greatest numerical cause of cerebral palsy. In fact Ford (1) states that in his series only 6% of all infantile cerebral palsies were due to birth injury, and that the rest were congenital. However, there is a great variety of possibilities. In the premature group alone several different things can happen. Pressure changes from the high pressure on the child during uterine contraction to the sudden low of air pressure, produces a condition similar to the bends or caisson disease. Langenskiold (2) mentions this in his article. Air embolism is possible under these circumstances as well as hemorrhage from rupture of the weak walls of the premature blood vessels.

In this group also is the mechanical injury from forceps. Depressed skull fractures with subdural hemorrhages produce usually the typical spastic changes. Traction, sufficient to stretch the neck produces a tear of the tentorium and the vein of Galen, with hemorrhage at the base of the brain as described by Crothers (3). This results in athetosis most frequently and can be produced by direct head traction in head presentations or by reverse traction in a breech, on the after-coming head. The oversized child in late deliveries is sometimes injured because of the dystocia, but this is less common.

Schreiber (4) has described cerebral anoxia as a frequent cause of cerebral palsy. This is due to the use of various drugs producing twilight sleep effects, and producing a depressor effect on the establishment of respiration. The resulting anoxemia causes anoxia of the brain and degenerative changes take place. Heyman (5) differentiates asphyxia from prolonged venous stasis, from anoxemia. Hemorrhage disease of the newborn and vitamin K deficiency are to be considered as well as icterus neonatorum. A large percentage of the cases report jaundice in some form as present during the first two weeks, but whether this is cause or result is open to question.

Acquired Cerebral Palsy

The third general group is that of cerebral palsy acquired after birth. This can be divided

into direct and indirect trauma, disease and degenerative conditions. Direct trauma is of course increasingly seen and may be the result of a skull fracture from a fall in early childhood, an automobile accident, or gunshot wound. Severe convulsive seizures in early childhood from hyperpyrexia or other cause may produce a ruptured cerebral vessel and Crothers (6) has been collecting a group in which severe whooping cough in young children or babies has produced the condition by causing a cerebral hemorrhage.

Encephalitis is a frequent cause of cerebral palsy. The youngest recorded cases are now those who acquired the disease under six months of age. Encephalitis lethargica, often called sleeping sickness, is not the only form to be considered. The various exanthematous diseases of childhood and pneumonia and typhoid fever have been complicated by brain involvement. Probably the two most common forms have been those following measles and pneumonia but there are others following whooping cough, mumps, and even chicken pox. There are also a number of cerebral palsies resulting from toxic sources. Two cases are recorded of well developed athetosis following the eating of book-matches. The causal relationship is indefinite but no other assignable cause could be found and of course this may have been coincidence. Cerebral embolus and cerebral thrombosis seen either in disease or post-operative conditions, must be considered and are difficult to distinguish from some forms of encephalitis.

Finally in this group are the degenerative diseases, such as dystonia musculorum deformans progressive, which may or may not be neurological in origin, but simulates true athetosis so closely that it is indistinguishable except by history of onset. In this group must be considered also the common paralytic stroke in the aged. While this is not necessarily degenerative disease of the central nervous system, the changes in the blood vessels and the atheromatous plaques which occur in the cerebral vessels are certainly of a degenerative nature.

The Problem of Prevention

This review shows that the etiology of cerebral palsy is extremely varied and that no one type of investigation can possibly solve the problem. How to control congenital malformations and the factors bearing on their development is certainly one distinct field of study. If Ford's statement quoted above that only 6% of infantile cerebral palsy is due to birth injury, is even ap-

proximately true, then correction of all birth difficulties would not reduce the total very greatly. But at any rate this is another and quite separate problem. The third field of study for the control of cerebral palsy is the well known field of general accident control. The fourth involves mainly the control of the virus diseases and their after effects and fifth, the study of the degenerative diseases at all ages, and the changes of senility. Thus the public health program for the control of cerebral palsy covers several wide areas of the field of public health investigation.

Rehabilitation

The distribution of cerebral palsy is very even throughout the country. There is no urban or rural difference in percentage. This would tend to prove that the causative factors were independent of obstetrical procedures or facility and would favor the preponderance of congenital etiology.

Types of Cerebral Palsy

A study of cerebral palsy shows that it is composed of five types; athetosis, spasticity, ataxia, tremor, and rigidity. The largest group is athetosis which comprises about 45% of the total. Spasticity is next and represents about 40%. Ataxia, tremor, and rigidity make up between them the last 15%. It is obvious therefore that the chief physical problems are those of athetosis and spasticity. There are very few mixed cases, but many spastics and athetoids are very hard to tell apart on causal examination.

It is of utmost importance in treatment to distinguish these two types since it has been found that their treatment differs radically. In a survey of the results of orthopedic surgical procedures on a large series of cases, good results were obtained in only about one-half of the cases operated on. This series was made up in the main of cases treated by excellent orthopedic surgeons. If, however, the operated cases were classified as spastics and athetoids, it was then found that the results of operation in the true spastics were almost uniformly good and those in the athetoids almost entirely failures. Spasticity, it is found, is a condition which involves certain muscles and not others and can be tested for and charted like poliomyelitis. Athetosis on the other hand is an involuntary attempt to change the position of an extremity or to bring it into a definite place with whatever muscles are necessary to accomplish this change. If certain muscles have been thrown out of

function by operation or even by a brace, other muscles will come into play. A typical example is that of an individual who had a pronator athetosis of the right arm. This was a very powerful athetosis so that it was very hard to force the forearm into supination. However, a brace was applied which extended from the tips of the fingers to above the elbow which maintained the forearm in supination. Whenever this brace was applied the arm immediately was raised above the head at the shoulder, thus bringing the hand into a palm down position and it was practically impossible to bring it down.

Another typical example was a girl whose foot constantly pulled into a marked varus position resulting in extreme intoeing. Her ankle was stabilized surgically and following this, she began to turn the whole leg into internal rotation from hip so that the resultant walking position appeared almost the same as before. Had either of these cases been spastic, the treatment described would have materially improved them. It can be seen therefore that in true spasticity orthopedic surgical procedures have a definite place, but that these operations will not work in athetosis.

The reason that the two conditions are so difficult to distinguish is chiefly that most athetoids employ voluntary tension in an attempt to control the involuntary motion. Thus they may appear to have a scissors gait, knee flexion, toe walking, and many of the other usual spastic characteristics. This tension eventually becomes habitual and is easily misconstrued. Obviously, releasing this tension surgically only would allow violent athetosis to develop in the opposite direction.

Spasticity is only hyperreflexia in given muscles. When any stimulus is applied to a spastic muscle it contracts. The most common of these stimuli is the stretching which occurs when the antagonist is voluntarily contracted. This stretching causes a spastic contraction resulting in a blocking of the desired motion. Muscle charts should be made of each spastic, charting the muscles that are spastic, and those that are not and thus determining the proper surgical or re-educational treatment. In the athetoids, relaxation therapy, by some of the carefully worked out methods as described, for example, by Jacobson or Behrend and Weiss, should take the place of the surgical procedures. Motor re-education follows both types of treatment. In the ataxics, motor re-education is the chief method of treatment.

Selection of Cases for Treatment, Mental Level, and Degree of Severity

Selection of cases for rehabilitation is very important especially since facilities are limited and all cases are not treatable. The question of mental level must be decided. Appearance in these patients is often very deceptive. Most of the mental deficiency is in the spastic group, since they represent largely cortical damage. It is difficult to explain true mental deficiency in the athetoids as their damage is basilar and it seems hardly probable that if damage were so extensive as to involve both the base of the brain and the intelligence areas in the cortex that the child would survive. The usual Binet tests frequently give very inaccurate results in the cerebral palsies since their accuracy is dependent upon a normal motor system. Also some degree of the purely physical side of the handicap are so great that the mentality cannot be tested. It is not wise to set a fixed I.Q. determination as a criterion for treatment in this group. A child with an I.Q. of 65 or 70 whose physical prognosis is very good, would be much more worthwhile for rehabilitation than a child whose I.Q. was 100 with a very poor physical prognosis. Thus severity of involvement must be considered entirely independently from mental level and separate determinations made in regard to this.

Aims of Treatment

There must also be very definite aims of treatment. It is not enough to say that the patient can be improved, but a statement must be made as to how the patient is to be improved. There are four general fields of endeavor—the legs, for walking; the arms for self help, the speech mechanism and general appearance, and the education. In connection with the third field, it can be said that it is harder to get a job for a patient with facial grimaces than for one who cannot walk. The hemiplegic represents a much greater problem than the patient with only both legs involved. These facts must be weighed and a definite decision arrived at as to what is to be undertaken for a definite aim.

Length of Time and Type of Treatment

Finally, the case must be evaluated as to the amount of time which will be necessary to accomplish the aim which has been decided upon, and the methods to be used. This will determine whether the patient will be hospitalized for surgery, go to an institution for re-education, or whether he can be treated as an out-patient at

some center or school. If the cases seen are classified first as regards type; chiefly spastic, athetoid, or ataxic, and then a separate classification made as to mental level and degree of severity, and these two factors balanced, the problem will become considerably simplified. The aim of treatment can then be decided upon as to whether the problem is one of teaching walking, self help or speech, or whether it may be the elimination of grimaces or other abnormalities of appearance which may make a great difference. Of course, these aims may appear in combination as well as singly. Then a final determination as regards time necessary, and methods of treatment to be used will determine the total probable cost not only in money but in personnel and housing.

Ideal facilities should provide an in-patient or boarding hospital-school to allow for intensive treatment over a long period of time, and an out-patient treatment unit for the less severe cases and those sufficiently improved to be discharged from the in-patient department. Treatment can be tapered off each year as improvement becomes greater.

Summary

Cerebral palsy presents a definite problem in both the field of public health and of rehabilitation. In public health the problem is complicated by the very great variety of etiological factors.

In the rehabilitation field it represents a problem of proper classification and evaluation of the physical and mental abilities. It is a group of conditions which, if properly classified, are as a whole susceptible of great improvement with careful and thorough treatment, and can in a large proportion of cases be sufficiently rehabilitated to take a worthwhile place in the community.

INFLUENCE OF "SODIUM AMYTAL" ON INTELLIGENCE

During air raids on London various sedatives were tried on anxious patients, not only therapeutically, but prophylactically to reduce apprehension and induce a state of relative mental calm. In order to determine the degree of mental impairment and the capacity to react reasonably to an emergency, Slater, et al., (*Lancet*, 1:676, June 6, 1942) measured the effect of "Sodium Amytal" (Sodium Iso-amyl Ethyl Barbiturate, Lilly) by means of standard intelligence tests which were performed on nearly 400 cases. It was concluded that doses of 3 grains or less did not impair the functioning of the patient's intelligence to any important extent. The drug must be prescribed, nevertheless, with individual susceptibilities and requirements in mind. Doses of 1 grain to 3 grains were most generally useful.

MEDICAL AND HOSPITAL, OBSTETRIC AND PEDIATRIC CARE FOR WIVES AND INFANTS OF MEN IN MILITARY SERVICE *

1. Eligibility

All expectant mothers in Arkansas, irrespective of legal residence, who state that the father of the expected child is in military service (U. S. Army or U. S. Navy, including the Marine Corps and Coast Guard) and not a commissioned officer, will be eligible for obstetric medical and hospital services provided for under this program without cost to the family. Any child under one year of age whose father is in the military service, but not a commissioned officer, will be eligible for pediatric medical and hospital care under this plan.

2. Authorization

The form M suggested in the memorandum by the Children's Bureau of May 1, 1942, will be printed by the Division of Maternal and Child Health. This form will be distributed to the wives of men in military service by the Arkansas Health and Welfare Department, by the American Red Cross and military authorities. The form will also be distributed to the physicians of this state. Part one of the form will be filled out by the patient when she reports to the physician of her choice. The physician will complete part two of this form and forward it to the director of the Division of Maternal and Child Health. The Maternal and Child Health director, or his authorized agent, will notify the patient, the attending physician and the hospital, if hospital care is recommended by the attending physician, and the local health department if the service is authorized. A similar procedure will be used for the authorization of medical and hospital care for infants eligible for these services.

3. Standards of Medical Care

Payment will be authorized for medical services under this plan only when the attending physician is licensed to practice in Arkansas by the Arkansas State Board of Medical Examiners.

Obstetricians and pediatricians who are certified by the American Specialty Boards or those who have devoted the major portion of their practice to obstetrics or pediatrics for the past three years will be appointed by the State Health Officer as consultants, and whenever possible will be available for consultations with the general practitioners participating in this plan.

4. Standards of Hospital Care

Obstetric or pediatric hospital care will be authorized in the hospitals of the state which have been approved by the American College of Surgeons or in those hospitals recognized by the regular medical profession in that community as adequate for obstetric and pediatric care.

5. Cost of Medical and Hospital Care

a. **Obstetrics**—Thirty-five dollars (\$35) will be paid to the attending physician by the State Board of Health upon receipt of evidence in the attached report form of complete medical service to the case as follows: At least five prenatal examinations provided by the attending physician during the prenatal period, and his care during labor, the puerperium (including care of the newborn infant) and for postpartum examinations. If home visits are necessary during the prenatal period for acute emergencies the physician will be paid the usual fee charged in that community. If prenatal care is provided in a clinic, the physician will be paid \$25 for his services during labor, the puerperium (including care of the newborn infant) and postpartum examinations. If the physician renders less than five prenatal examinations he will be paid at the rate of \$2 per examination.

b. **Pediatrics**—Child health supervision will be provided in existing child health conferences. If no such conferences are available they will be established if possible. If the infant becomes sick and needs home or hospital care the first medical visit will be paid for by the State Health Department without prior authorization at the rate of the usual fee in that vicinity. Subsequent care will be paid for by the State Health Department only after prior authorization by the Maternal and Child Health director at the rate of \$10 per week, either in the home or hospital, provided there has been a minimum of three visits per week to the case. Such authorization cannot exceed two weeks or a total of \$20 for the case without review of the case and recommendation by a pediatric consultant to the State Board of Health. If there have been less than three visits per week the physician will be paid a proportionate amount. Obstetric and pediatric consultants will be paid a fee of \$10 when consultation is necessary.

c. **Hospital Costs**—Hospital care that has been authorized by the State Health Department

* Prepared by the Committee on Maternal and Child Welfare and approved by the Council.

will be paid for at the per diem cost rate of each approved hospital. The per diem cost rate for maternity care will include all costs of care while the mother and newborn infant are in the hospital, including delivery room, laboratory services, drugs, etc., except the medical services of the attending physician. The per diem cost rate at each hospital will be determined by a study of the costs of each hospital if approved by the Maternal and Child Health director. Payment will be made to the hospital upon receipt of a record showing the date and hour of admission and discharge of each patient for whom care was authorized by the State Maternal and Child Health director.

PHYSICIANS RECORD OF MEDICAL CARE
(Child Whose Father is in Military Service)

Upon completion, please mail to: ARKANSAS STATE BOARD OF HEALTH
Director, Division of Maternal and Child Health, State Health Department Building
Little Rock, Arkansas

Patient's Name

Birth Date

Sex

Color

Patient's Address

Tel. No.

Mother's Name

Father's Name

Military Rank

EMERGENCY UNAUTHORIZED VISIT: Date

Home, Office, Hospital, etc.

Fee

AUTHORIZED VISITS:

Date	Place	Date	Place
	Home, Office, Hosp., etc.		Home, Office, Hosp., etc.
1.		7.	
2.		8.	
3.		9.	
4.		10.	
5.		11.	
6.		12.	

SUMMARY OF HISTORY AND PHYSICAL FINDINGS

DIAGNOSIS

SUMMARY OF TREATMENT

CONSULTATION: Date Name of Consultant

Indications for Consultation

Recommendations

M. D.

Date

(Use reverse side for comments)

ARKANSAS STATE BOARD OF HEALTH

Application for Authorization for Medical and Hospital Maternity Care

Prepared for the use of expectant mothers in need of maternity care whose husbands are on duty with the United States Army or Navy, including Marine Corps and Coast Guard (except wives of commissioned officers)

PART I. TO BE FILLED OUT BY PATIENT

Patient's name. _____
(Last) (First) (Middle)

Patient's present address.....Street.....City.....State.....Tel. No.....

Name of husband.....
(Last) (First) (Middle)

Military rank or title.....

Husband's address.....

Signature of patient..... Date signed.....

PART 2. TO BE FILLED OUT BY ATTENDING PHYSICIAN

Maternity Care

Expected date of confinement..... Date patient given first

physical examination by me during this pregnancy.....

Delivery recommended: At home.....in hospital.....

Name of hospital recommended.....

If medical care is authorized by the State Health Department, I agree to provide to the best of my ability prenatal, delivery, and postpartum medical care to this patient and care of the newborn infant at the rates paid by the State Health Department, without further charge to the patient or her family.

Date.....

Signed _____ M. D.

Attending physician will mail this form to ARKANSAS STATE BOARD OF HEALTH
Director, Division of Maternal and Child Health, Little Rock, Arkansas

ARKANSAS STATE BOARD OF HEALTH

Application for Authorization for Medical and Hospital Pediatric Care

Prepared for the use of children in need of medical care whose fathers are on duty with the United States Army or Navy, including Marine Corps and Coast Guard (except commissioned officers)

PART I. TO BE FILLED OUT BY PARENT OR GUARDIAN

Patient's name.....
(Last) (First) (Middle)

Mother or guardian's name.....

Patient's present address : Tel. No.

Street City State

Father's name.....
(Last) (First) (Middle)

Military rank or title.....

Father's address.....

Signature of parent or guardian Date signed

PART 2. TO BE FILLED OUT BY ATTENDING PHYSICIAN

Tentative diagnosis

Care recommended: At home.....in hospital.....

Name of hospital recommended

If medical care is authorized by the State Health Department, I agree to provide it to the best of my ability at the rates paid by the State Health Department, without further charge to the patient or family.

Date

Signed _____ M. D.

Attending physician will mail this form to ARKANSAS STATE BOARD OF HEALTH
Director, Division of Maternal and Child Health, Little Rock, Arkansas

PHYSICIANS RECORD OF MATERNITY PATIENT
(Wife of Man in Military Service)

Upon completion, please mail to: ARKANSAS STATE BOARD OF HEALTH
Director, Division of Maternal and Child Health, State Health Department Building
Little Rock, Arkansas

Patient's Name _____ Birth Date _____ Color _____
Patient's Address _____
No. Previous Pregnancies _____ Full Term _____ Premature _____ Miscarriages _____ Living Children _____
PAST HISTORY OF PATIENT: Cardiac _____ Renal _____ Mental _____
Tuberculosis _____ Venereal Disease _____ Rheumatism _____
Operations and other _____
POSITIVE PHYSICAL FINDINGS: _____

PELVIC EXAMINATION: Perineum _____ Cervix _____ Discharge _____
Uterus _____ Appendages _____
PELVIC MEASUREMENTS: Diag. Conj. (11.5—) _____ Tubers (8—) _____ Post. Sag. (8—) _____
BLOOD WASSERMANN: Date _____ Result _____

PRENATAL VISITS:

Date	Weight	Blood Pressure	Urine	Remarks
1. _____	_____	_____	_____	_____
2. _____	_____	_____	_____	_____
3. _____	_____	_____	_____	_____
4. _____	_____	_____	_____	_____
5. _____	_____	_____	_____	_____

EMERGENCY HOME VISITS: Date _____ Miles Travelled _____ Fee _____
Condition requiring visit _____

RECORD OF DELIVERY:

Date of Delivery _____ Full Term _____ Premature _____ Miscarriage _____
Delivered at _____ Delivered by _____
Type of Delivery: Spontaneous _____ Operative (Kind) _____

Duration of Labor _____
Drugs and Anesthesia Used _____
Lacerations: Yes _____ No _____ Repair: Yes _____ No _____
Complications _____

INFANT: Sex _____ Birth Weight _____ Condition at Birth _____

Abnormalities _____

MOTHER'S POSTPARTUM PROGRESS

Postnatal Examination: Date _____ Blood Pressure _____ Urine _____
Breasts _____ Abdomen _____
Perineum _____ Cervix _____
Uterus _____ General Condition _____
CONSULTATION: Date _____ Name of Consultant _____
Indication for Consultation _____

Recommendations _____

M. D.

(Use reverse side for any comments)

RHEUMATIC FEVER *

A. A. BLAIR, M. D., F. A. C. P.
Fort Smith

The relative infrequency of rheumatic fever and the rarity of typical polyarthritis in southern as compared to northern states is the occasion of this paper, to increase the interest and alertness of physicians living in Arkansas to recognize this disease early. Should we stop to consider rheumatic fever in all its various forms, including chorea and inactive rheumatic carditis, with and without superimposed bacterial carditis, unquestionably many cases would be recognized earlier and suitable regime could be prescribed whereby the lives of many individuals could be prolonged. Too frequent do we see cases come in to the office with a mild degree of mitral obstruction in the late teen ages, and after careful inquiry into the history, we are able to find that this patient between the ages of from 5 to 10 years, suffered from a mild prolonged undiagnosed fever, or may be a history of having been actually treated for chorea, and the medical advisor not having explained fully to the parents that the child was suffering from a rheumatic infection.

Infections of the upper respiratory tract precede 50% or more of rheumatic attacks. The medical profession is aware of the close association of streptococci and rheumatic fever. Reports frequently occur giving claim to the discovery of a specific etiological agent, usually some strain of streptococci. Recently much importance has been given to the study of Group A hemolytic streptococci and the importance of infections with this organism becomes more apparent, but whether these bacteria are primary or merely an important associated etiological agent, has not been proved.

The first manifestations of rheumatic fever vary in young and in adult life. In younger individuals it has been a common observation that the dominant complaint in the beginning is multiple arthritis in at least half the cases; chorea and heart involvement in about a third. As time goes on polyarthritis becomes less important, so that after 40 years it is seen in not more than a fifth. At the same time the valvular lesions of the heart without signs of active rheumatic infection make their appearance in increasing numbers, so that after 40 years they probably account for not less than 80% of rheumatic lesions.

In our present day the well educated layman

is aware of the probabilities that growing pains may be on a rheumatic basis and many mothers will bring the child in for examination and advice. While in many instances we are unable to explain leg pains, however it is a common knowledge that we rarely see leg pains and chorea in rheumatic individuals after 20 years of age. These symptoms are seen far more frequently in girls than in boys. Present information available from statistics show that heart infection occurs first at a maximum age of 6 years, and polyarthritis from 6 to 8 years; chorea presents itself in maximum numbers at the age of 8. After all reports from the New York Heart Association that rheumatic fever is to be found preponderantly (about 2/3rds) among children, while the maximum number has its beginning at the age of 8 years, but if all the older cases are considered, the mean age at onset would be 15 years, both for boys and girls. If this disease begins as a mild type, its subsequent course is likely to be mild. If in childhood the onset is severe, recurrences are likely to be severe, and some 80% of the latter will not survive adolescence. Multiple valvular affections, aortic and mitral, are common enough at all ages, but greatest in number in adolescence, mitral much more frequently involved than the aortic.

Inasmuch as mitral stenosis is the most common sequel of rheumatic heart disease, I would like to pause briefly to discuss this serious type of heart lesion. First, "rheumatic mitral disease" includes both mitral incompetency and mitral stenosis. Either of these conditions may predominate over the other, and rarely one is present in the absence of the other. The pathology involved is an acute inflammation of the valve, plus vegetations, scar formation with distortions of valve. If mitral stenosis occurs, the burden of overwork falls upon the left auricle, the pulmonary vessels and right ventricle. As for detectable symptoms, they may be few, especially in the younger patients. In the older individual, fatigability on effort is experienced.

Probably the earliest symptoms referable to the heart are dyspnoea, palpitation, tachycardia and dizziness. On examination when all the signs are present, the diagnosis of mitral obstruction is relatively easy. However, it is often missed by careful examiners when there are missing links in the chain of evidence. On palpation, pulsations in the 2nd and 3rd left costal interspace may occur. A diastolic thrill is commonly felt, especially in thin chested persons, in the mid precordium. The most characteristic auscultatory sign is a low pitched, rough, rumbling mid diastolic or

* This is the first in a series of brief articles on the heart, prepared by the Society's Committee on the Heart, for publication in The Journal.

presystolic murmur. It is best heard after exercise with the patient lying on back, or, preferably, turned on left side, heard best over apex. The pulse volume is usually small. Under the fluoroscope the heart shadow is fairly characteristic, the left border is less concave and often bulged. The electrocardiogram will often show right ventricular preponderance (right axis deviation).

As to treatment, it is more less symptomatic, and space does not permit of details. The first and most important consideration in early care of rheumatic heart disease in children should be to make a careful evaluation for the presence or absence of active rheumatic infection. So important is this single factor that it forces all other considerations well into the background. In borderline cases it may be difficult or even impossible to determine this all important question without prolonged and careful study. Active rheumatic infection may be so trivial that it is well below the threshold of recognition clinically, and be accompanied only by illy defined or abortive symptoms. Therefore, one should always view with suspicion poor general health in children, especially if accompanied by fatigue, weight loss, loss of appetite, and especially if accompanied by transient muscle or joint pains and persistent low grade fever. In this instance laboratory procedures are of great value in determining the diagnosis in such questionable cases. A mild leukocytosis, increased sedimentation rate of the red corpuscles, or a long auriculoventricular conduction time recorded by the electrocardiogram will add facts to the suspicion of active rheumatic infection. Every patient with active disease should have prolonged bed rest as you would treat tuberculosis. This should be maintained weeks, months, or even one or two years if necessary, as long as there is either clinical or laboratory evidence of activity. The blood sedimentation rate is the most reliable laboratory test to determine when active rheumatic infection has subsided.

The Oklahoma City Clinical Society has completed its preparations for the twelfth annual conference to be held October 26, 27, 28, 29. In preparing the program this year, special effort has been necessary, and much additional work entailed because of the national emergency. The Society has been able, however, to secure speakers and teachers of unusual ability, and the caliber of the meeting is expected to exceed the excellent conferences of the past. Emphasis has been placed upon traumatic and industrial phases of medicine and surgery, which are particularly appropriate at this time. The guest speakers are:

Dr. James E. Paulin, President-elect of the American Medical Association, Atlanta, Georgia;

Dr. Isaac A. Bigger, Professor of Surgery and Surgeon-in-Chief, Medical College of Virginia, Richmond, Virginia;

Dr. George M. Curtis, Professor of Surgery, Chairman of Department of Research Surgery, Ohio State University, Columbus, Ohio;

Dr. Frank H. Ewerhardt, Assistant Professor of Physical Therapy, Washington University School of Medicine, Saint Louis, Missouri;

Dr. Frederick H. Falls, Professor and Head of Department of Obstetrics and Gynecology, University of Illinois College of Medicine, Chicago, Illinois;

Dr. Charles C. Higgins, Urology, Cleveland Clinic, Cleveland, Ohio;

Dr. Sara M. Jordan, Department of Gastro-Enterology, Lahey Clinic, Boston, Massachusetts;

Dr. John Albert Key, Clinical Professor of Orthopedic Surgery, Washington University School of Medicine, Saint Louis, Missouri;

Dr. Byrl R. Kirklin, Professor of Radiology and Director of Division of Radiology, Mayo Foundation, University of Minnesota, Rochester, Minnesota;

Dr. Andrew W. McAlester III, Ophthalmology, Kansas City, Missouri;

Dr. Donovan J. McCune, Associate Professor of Pediatrics, College of Physicians and Surgeons, Columbia University, New York, New York;

Dr. Frank J. Novak, Jr., Senior Attending Otolaryngologist, Henrotin Hospital, Chicago, Illinois;

Dr. Albert O. Singleton, Professor of Surgery, Medical Department, University of Texas, Galveston, Texas;

Dr. Tom D. Spies, Associate Professor of Medicine, University of Cincinnati College of Medicine, Cincinnati, Ohio;

Dr. Howard C. Taylor, Jr., Associate Professor of Obstetrics and Gynecology, New York University of Medicine;

Dr. Willard O. Thompson, Associate Professor of Medicine, University of Illinois Medical School, Chicago, Illinois;

Dr. Eugene F. Traub, Associate Clinical Professor of Dermatology and Syphilology, Skin and Cancer Unit, Post Graduate Medical School and Hospital, Columbia University, New York, New York.

Symposia presented by local physicians and discussed by guest speakers will continue to be most practical and stimulating.

Entertainment of the visiting physicians is not to be neglected, and the unique program for the annual smoker, "Hell's Broke Loose" promises to be a most hilarious evening.

Medical meetings of this type will necessarily be curtailed during the war period, and the Clinical Society therefore urges all physicians of the Southwest to avail themselves of these opportunities as they are presented.

The registration fee of \$10.00 includes ALL the general assemblies, round table luncheons, dinner meetings, post-graduate courses, and smoker, for registrants from outside Oklahoma City. Additional information may be obtained from the Secretary, 512 Medical Arts Building, Oklahoma City.

TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

INDUSTRIAL health and tuberculosis in industry are topics of great concern to all nations at war. Britain, the senior partner of the United Nations by length of service, was confronted much earlier than we were by problems arising from the conversion of peace economy to war production. The following are abstracts from recent British publications.

INDUSTRIAL HEALTH

The recent reformation which has taken place in the health and life of the industrial worker in Britain is one of the most impressive and remarkable chapters in the progress of preventive medicine. It records a development from disorder, neglect and confusion to regularity and discipline, and from arbitrary mismanagement to scientific planning. It has become physiological, social and personal in objective. This is of national importance, for it affects five or six million men and women workers in the factories, and twenty million workers outside them. It sets a standard for all employment, and crystallizes British conceptions and traditions. It is perhaps the most popular of all public methods of preventive medicine, and has in it the elements of a liberal education. It improves and fortifies the

individual health of the workman—his only capital—increasing his dividend, lengthening his life and enlarging his opportunity and personality. It affects the whole man—his habits and character, his domestic life, his family and his home as well as his workplace. It is a great school of citizenship and health education of body, mind and spirit.

The worker himself, and not his factory environment, is the vital factor. His fitness, capacity, endurance and willpower are the chief requirements in order to prevent that overstrain, fatigue and disharmony which may be the precursor of disease. This is the center of gravity.

Industrial Health, Sir George Newman, Britain Today, February, 1942.

THE TUBERCULOUS IN INDUSTRY

For years the after-care attention meted out to post-sanatorium cases has been the Cinderella of the Tuberculosis Service. This has been due to a variety of reasons. In the main, the results were less spectacular than those of the operating theatre and hence never achieved the same popularity in the lay mind; and again with a floating peacetime unemployed population of about three million, healthy labor was at a premium.

Information about tuberculous disease or previous treatment at a sanatorium or dispensary should be made compulsory for all persons entering industry. This is the practice at military boards and there appears no legitimate reason why this should not be incorporated into the civilian industrial life of the country. Such a

measure would ensure the control of infection in the interests of the health of the community. Naturally, such a course will occasion opposition. It will be argued that this represents an encroachment on the freedom of the individual; however, freedom would be an intolerable institution if it permitted an individual indiscriminately to infect with disease his fellow creatures.

An extremely strong case can be made out in view of the recent extension of the defense orders making the treatment of scabies compulsory in the interests of national health. The extension of such a defense regulation to incorporate tuberculosis should prove a relatively simple legal measure.

Some Reflections on the Tuberculous in Industry, Bertram Mann, M. D., Tubercle, March, 1942.

MASS RADIOSCOPY IN FACTORIES

Much has been written lately concerning the value of mass radiography of the chest, and reports, among others, of investigations into the pulmonary pathology of Australian recruits, British sailors and University College Hospital students are available, but so far little has been done in this country with the ordinary unselected civilian population. Anyone who has felt the urge to conduct such an examination must at once have become conscious of the many difficulties, of which lack of suitable apparatus and the reluctance of the population to submit to examination are the chief. Nevertheless, few of

us doubt that these difficulties will soon be overcome.

X-ray screening of the chest was offered to the work-people in two factories, the management allowing this to be done in working hours. In the first, 60% and in the second, 97% came for examination. Of 575 people examined in the first factory, three were found to be tuberculous. Of 795 examined at the second factory, two were known to have phthisis and two others were found to have active disease.

Mass Radioscopy in Factories—Two Small Surveys, A. Stephen Hall, M. B., *The Lancet*, February 7, 1942.

WEEDING OUT TUBERCULOSIS

Commenting on the above article by Dr. A. Stephen Hall, a later issue of *The Lancet* states in an editorial:

"In each factory about 0.5% of the workers had clinically significant tuberculosis. This percentage is lower than that found in similar mass surveys elsewhere, a common figure being between one and two per cent. The question therefore arises whether the examiner sees as much and as truly on the fluorescent screen as on the developed film.

"In this welter of instrumental aid when employers and employees alike have been led to expect surveys which will 'wipe out tuberculosis' it may be well to add a cautionary word. No diagnosis is ever made on a fluorogram; any doubtful or abnormal finding calls first for a

full-size radiogram and, should the abnormality be confirmed, a thorough physical overhaul. If the whole method is not to be discredited, and if hardships and misery from faulty diagnoses are to be eliminated, as much thought must be given to the training of personnel as to the choice of apparatus.

"If a worker submits voluntarily to examination he will naturally ask that he and his family are not to suffer financially while undergoing treatment for what, in his opinion, might have healed at work. Tuberculosis is coming to be regarded more and more as a disease of economics."

Weeding Out Tubercle, Editorial, *The Lancet*, March 21, 1942.

COMMUNIQUE

B. A. Bennett, 0-255345,
Major, M. C. 43rd Engineers,
A. P. O. 924, U. S. Army,
San Francisco, Cal.

To the Editor:

Hello Everybody

IN AUSTRALIA

Can't write a thing, the censor is to blame,
All I can say is I'm well and then sign my name.
Can't tell where we sailed from, nor mention
the date,
And can't give the number of meals that I've
ate.
Can't say where we were going nor when we
found land
And can't even inform you if we were met by a
band.

Can't mention the weather nor say if there's
rain, as,

Military secrets must secrets remain.

Can't have a flashlight to guide me at night
And can't smoke a cigarette except out of sight.
Can't keep a diary for such is a sin
And can't keep the envelopes your letters
come in.

I can't say for sure, Bill, just what I can write
So I'll call this my letter and close with good
night.

Have seen Gephart here, and if you know of
any of the other boys being over here, let me
know who they are.

Best regards to your family and all the boys
that you may come in contact with.

Sincerely yours,

Bennett.

The President's Page

• • •

NATIONAL CONFERENCE OF PRESIDENTS OF STATE MEDICAL SOCIETIES

A National Conference of Presidents of State Medical Societies has been called October 5th at Hot Springs National Park with our Society acting as host. The purpose of this meeting is to assemble the leadership of American medicine to discuss military and civilian medical problems.

At this writing Col. Fred Rankin, President of the American Medical Association, and Dr. Morris Fishbein, Editor of the Journal of the American Medical Association, have accepted places on the program. Others who have been invited are Mr. Paul McNutt, War Manpower Chief; Surgeon General James C. Magee of the Army; Surgeon General Ross McIntire of the Navy; Surgeon General Thomas Parran of the Public Health Service; Col. Sam Seeley of the Procurement and Assignment Service; Dr. E. H. Cary of the National Physicians Committee; and United States Senator-elect John L. McClellan.

The meeting will be held at the Arlington Hotel in Hot Springs and all physicians are invited to attend the sessions of this conference. I would be pleased to receive a postal card from each physician who plans to attend so that I may know how extensive the accommodations must be.

R. B. ROBINS, President.

THE JOURNAL

OF THE

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W. R. BROOKSHER, M. D., Editor
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NEWS—Our readers are requested to send in items of news, also marked copies of newspapers containing matter of interest to the membership.

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Ninth District—J. F. JOHN	Eureka Springs
Tenth District—CLYDE McNEIL	Rogers

EDITORIALS

THE ATLANTIC CITY SESSION OF THE AMERICAN MEDICAL ASSOCIATION

The 1942 annual session of the American Medical Association held in Atlantic City, June 8th-11th, was a wartime session. The dim-out of Atlantic City, the uniforms, the business transacted, all reflected the somber spirit of the meeting. The total registration was 8,238 of whom 11 were from Arkansas. Planned as a Pan-American meeting, attendance of physicians from Central and South America was small due to difficulties in obtaining passage from their countries. The address of Paul V. McNutt, Administrator, War Manpower Commission, was given emphasis in press reports. Summarized, his remarks were to the effect that American medicine should be proud that its organization alone had been entrusted with the duty of selecting from its own ranks those required for service with the armed forces as well as designating those needed in a civilian capacity. He stressed the need for more medical officers and asked those in attendance to not

fail in the obligation to furnish the needed physicians for military service. The Distinguished Service Award was presented to Ludwig Hekoten of Chicago.

Among the actions taken in the House of Delegates were:

1. An endorsement of the activities of the National Committee for the Extension of Medical Service.

2. Establishing standards for approved schools for medical record librarians and technicians.

3. Endorsed the giving of professional care by physicians in lieu of cash in fulfilling medical care insurance obligations of approved organizations.

4. Disapproved suspension of dues of fellows entering military service.

5. Approved of an attempt to correct the burdensome tax provision whereby a deceased physician's estate is taxed, for income purposes, on a fair valuation of the accounts receivable acquired during life.

6. Refused to increase the number of trustees.

7. Approved of proper action to permit payment of narcotic license permits by personal check.

Officers elected were: President-elect, James E. Paulin, Atlanta; Vice-President, W. J. Carrington, Atlantic City; Secretary, Olin West; and Trustees, R. L. Sensenich, South Bend and E. M. Palette, Los Angeles. Annual meetings will be held as follows: 1943, San Francisco; 1944, Saint Louis; and 1945, New York City.

MEDICAL AND HOSPITAL, OBSTETRIC AND PEDIATRIC CARE FOR WIVES AND INFANTS OF MEN IN THE MILITARY SERVICE

The Journal publishes in this issue the agreement whereby the Federal government agrees to compensate physicians within the state for medical care of the wives and infants of enlisted men. This agreement is the result of careful study by the Society's Committee on Maternal and Child Welfare and has been approved by the Council. In the deliberations incident to approval of the agreement, the services of the staff of the Arkansas State Board of Health, the cooperating agency, have been most helpful.

This represents a new field of endeavor in the provision of medical care by the Federal government. Prudence dictates that physicians shall enter into this with full regard for its possible extension and with the realization that data ac-

cumulated may subsequently be employed by Federal agencies in support of similar measures. The agreement calls for a high level of medical care. The medical profession can not afford to do otherwise than to provide these beneficiaries with the highest possible standard of obstetric and pediatric care.

HISTORY OF THE ARKANSAS MEDICAL SOCIETY

Response to editorial announcement in the August issue of The Journal in which advance subscriptions were solicited to permit publication of the History of the Arkansas Medical Society has been negligible. Provided sufficient advance subscriptions at fifty cents per copy are received, the History will be published in pamphlet form for the benefit of the members. If you desire such a copy, you are requested to remit fifty cents for each copy desired to the office of the state secretary. Publication of the pamphlet can only proceed if sufficient advance subscriptions are received. This is final call for advance subscriptions. Please send yours now.

A SIDE-THOUGHT

Speculation over our rural situation, where our young doctors do not locate because of poor or no hospital facilities and small remuneration for scientific work and where the custom still remains for doctors to work singly instead of in groups and specializing in separate fields, holding on to the antiquated idea that a doctor should be able to cover the whole field of medicine scientifically and which methods drive much of the practice and all the larger fees to larger centers of population, should cause thought for our situation after the war, which will release many a doctor who had formerly fitted in well into a country practice, but because of his new training, new contact and prestige will cause him to locate in a large center of population, leaving even fewer doctors in the rural districts and of poorer quality and aged.

If we would keep the situation in our own hands, medical schools should encourage young doctors to locate in the country, where competition is less and where the field is open to scientific work, and where interest may be created to organize hospital units. If our medical schools and organized medical groups do not see this situation and undertake to correct it, we may

expect our Uncle Sammy to come in and do it for us.

Yours for winning the war and winning the peace and the stabilization of our national economy and the maintenance of our independent democratic way of life.

C. E. Dungan, Augusta.

COMMUNIQUE

6th Port of Embarkation,
Fort Hamilton, New York,
August 10, 1942.

To the Editor:

Have just received my copy of the August Journal and enjoyed reading the various "communiques" therein. Note also that many of the Arkansas doctors are being called into the service and that you have been touring the state on the procurement job.

Please address future copies of the Journal as below.

There are five Arkansans in this organization including my dental officer, Capt. Douglas Lewis of Dumas. Best wishes to the Society and with kindest personal regards.

Cordially yours,

A. M. Washburn, Lt. Col., M. C., 0-209127
6th Port of Embarkation
A. P. O. 1295
Care Postmaster
New York, New York

COMMUNIQUE

7th Station Hospital,
A. P. O. No. 1233,
Care Postmaster,
New York, New York.
August 15, 1942.

To the Editor:

Have a very good assignment with the Seventh Station Hospital. We are in a staying area in preparation to go overseas, where there will be some professional service for us to perform.

Please change the mailing address of my Journal to that above.

Many thanks and good wishes to all until my return.

Yours truly,
F. S. Dozier, Captain, M. C.

PROCEEDINGS OF SOCIETIES

"1,000 Questions and Answers on Tb.," a publication of the National Tuberculosis Association, a booklet designed as a time-saver for physicians whose patients ask questions without end about tuberculosis, is available on request to members from the Arkansas Tuberculosis Association, 444 Donaghey Building, Little Rock.

The Lawrence County Medical Society was addressed at Black Rock, July 14th, by P. W. Lutterloh, Jonesboro, and Paul Gray, Batesville.

Chas. D. Tibbels, Secretary.

The Lawrence County Medical Society was addressed at Walnut Ridge, August 12th, by H. G. Rudner and J. J. Shea, Memphis, and P. W. Lutterloh, Jonesboro.

Chas. D. Tibbels, Secretary.

PERSONALS AND NEWS ITEMS

"A Correlated Study Guide for Medical Students," by E. Lloyd Wilbur and Paul C. Eschweiler, Little Rock, appeared in the August issue of the Southern Medical Journal.

A. C. Curtis, State Sanatorium, has been appointed Director, Division of Tuberculosis Control, Arkansas State Board of Health.

J. B. Wharton, Jr., El Dorado, has been called to active duty as Lieutenant, Naval Medical Corps Reserve, and assigned to Naval Hospital, Corpus Christi.

Lt. Col. Hugh Brooke, Conway, is now stationed at the 5th Base Hospital, Camp Young, Calif.

MARRIED—On June 6, 1942, W. R. Parsons, Little Rock, and Miss Roberta Bailey, Ohioyle, Pennsylvania, and Washington, D. C.

W. R. Parsons, Little Rock, has been called to active duty as Captain, Medical Corps, Army of the United States, and assigned to the Station Surgeon's Office, Fort Sam Houston, Texas.

E. J. Horner has been elected surgeon of the Jonesboro post of the American Legion.

B. J. Reaves, Little Rock, has passed his examinations as a Diplomate of the American Board of Obstetrics and Gynecology.

Ellis P. Cope, Little Rock, has been called to duty as Captain, Medical Corps, Army of the United States, and assigned to Hensley Field, Texas.

W. H. Bruce, Pine Bluff, has been elected President of the Jefferson County Medical Society.

John S. Agar, Little Rock, has been called to duty as Lieutenant (j.g.), Medical Corps, United States Navy, and assigned to Naval Hospital, Corpus Christi, Texas.

W. J. Hunt has been elected surgeon of the Warren post of the American Legion.

O. L. Atkinson, Hampton, has been elected commander of the eleventh district, American Legion.

Bryce Cummings has been elected surgeon of the Little Rock post of the American Legion.

E. Baker has been elected surgeon of the Dermott post of the American Legion.

Belle Dale Poole, El Dorado, has been appointed Medical Consultant, Crippled Children's Division, Department of Public Welfare, Little Rock.

Capt. S. S. Kirkland, formerly stationed at Fort Leonard Wood, Missouri, has been transferred to the 34th Evacuation Hospital, Camp Barkley, Texas.

Driver Rowland, Hot Springs National Park, has been called to active duty as Captain, Medical Corps, Army of the United States, and assigned to Turner Field, Albany, Georgia.

M. W. Duncan, Centerton, was recently honored at a community dinner in celebration of his 41 years of practice there.

MARRIED—at Philadelphia August 7th, Lt. O. B. Barger, formerly of Mountain Home, and Miss Loreen Anderson, Elm Springs.

Dr. and Mrs. Hugh Johnson, Fort Smith, spent a recent vacation in New York City.

L. M. Lile has been elected surgeon of the Hope post of the American Legion.

A. D. Cathey has been elected surgeon of the El Dorado post of the American Legion.

"The Value of Gold Salts in Chronic Arthritis," by F. J. Scully, Hot Springs National Park, appeared in the August Tri-State Medical Journal.

A. W. Thompson, Bentonville, has been called to active duty as Lieutenant, Medical Corps, Army of the United States, and assigned to Camp Bowie, Texas.

Doris Baldridge, Conway, has been appointed Faulkner County Health Director.

Alan G. Cazort addressed the Little Rock Rotary Club August 20th on "Allergy."

Dr. and Mrs. S. J. Wolfermann and E. C. Moulton, Fort Smith, spent an August vacation in Colorado.

N. T. Hollis, Little Rock, recently addressed the Beebe Kiwanis Club.

John E. Greutter, Little Rock, has been called to active duty as Lieutenant, Medical Corps, Army of the United States, and assigned to Camp Robinson.

J. M. Nisbett, Little Rock, has been called to active duty as Captain, Medical Corps, Army of the United States, and assigned to Cantonment Hospital, Fort Sill, Oklahoma.

J. E. Stevenson, Fort Smith, attended the national trap shoot in Dayton, Ohio, during August.

Ralph E. Weddington, Batesville, has been called to active duty as Captain, Medical Corps, Army of the United States, and assigned to La Garde General Hospital, New Orleans.

J. B. Holder, Monticello, has been called to service as Lieutenant, Medical Corps, Army of the United States, and assigned to La Garde General Hospital, New Orleans.

I. N. McCollum, Conway, has returned to active practice following a prolonged disability from an injury.

N. T. Hollis has been elected superintendent of the adult division of the Winfield Methodist Church School in Little Rock.

R. B. Robins, Camden, recently addressed the El Dorado Lions Club on "Progress in Medicine."

Fred W. Harris and Randolph T. Smith, Little Rock, recently attended a course on chemical warfare agents at the University of Cincinnati School of Medicine.

C. A. Churchill, Batesville, has been called to active duty as Captain, Medical Corps, Army of the United States, and assigned to Base Hospital, Bowman Field, Louisville, Kentucky.

OBITUARY

JEFF T. HOLCOMBE, age 77 years, Mineral Springs, died in a Texarkana hospital August 5th. Born in Hempstead County in 1863, he had lived at Mineral Springs since youth. Surviving relatives are two sons and a daughter.

JOHN M. STEWART, age 57, of Van Buren, died August 17th after a short illness. Born at Columbus, Kentucky, he lived at Martin, Tennessee, during his youth and graduated from Vanderbilt University School of Medicine in 1912. He first practiced at Martin but located at Van Buren in 1925. During the World War he served as Captain in the Army Medical Corps. Surviving relatives are his wife and two daughters.

CLYDE VERNON POWELL, age 54, Forrest City, was killed in an automobile accident August 13th. Born March 6th, 1888, at Derma, Mississippi, he graduated from Memphis Hospital Medical College in 1913 and had practiced in Round Pond prior to his appointment as Saint Francis County Health Officer in 1938. During the World War he served as a medical officer. Surviving relatives are six brothers and one sister.

RANDOM THOUGHTS OF THE SECRETARY

July 29th. En route Prescott via Arkadelphia, Clyde McNeil proves himself to be a reticent and retiring individual when traveling by air, making absolutely no conversation and manifesting negligible interest in the Ouachita Mountains, the State Sanatorium, or any of the points along the route. The late arrival of Shuffield, McCaskill and Mahoney at the Arkadelphia airport gives opportunity for a bit of hangar flying but efforts to locate Chas. Townsend are futile. In Prescott, McCaskill guides us to the hospital, much in the manner that he once drove to Piggott via Missouri. Late to Buchanan's lodge out of Prescott finding all others gathered and much at home. One of those happy occasions with abundant good food, good fellowship and joy for all the evening and reluctantly to bed at Al's in town after he related some more of the interesting events of a happy career in medicine.

July 30th. With Clyde sleeping all the way across the Ouachitas blissfully unaware that a times we cleared these peaks with but 300 feet to spare and no landing spots within a township's borders, we land and resume more prosaic activities.

August 6th. Comes this evening Stanley Gates, the busy station hospital mess officer from Chaffee, and maid's night out is enlivened and made quite an occasion by his presence. Manifesting no concern over the possibilities, he volunteers to take the youngster and the visiting cousin to their first wrestling match and we anticipate less Red Skelton conversation and more Red Berry performances out our way as a direct result.

August 7th. Wondering if our Hot Springs' colleagues get only those patients who have been "clipped" by doctors elsewhere as the mayor says.

August 15th. In common with several hundred we take the train for Little Rock this afternoon. Noting the crowded main streets of Morrilton where tire conservation is apparently not seriously considered as there cannot be more than a half dozen cars at home this night. To the new home of the Autry's, we having the honor of being first house guest. Scanning many forms into the morning to finally get a more satisfactory picture of the part of Arkansas physicians in the war since May first.

August 16th. Today Captain Shippey demonstrates unusual aptitude in evaluation of the significance of the phrase "alert" as applied in the Army thus giving all of us at home added realization that the war is going to be a long and hard one.

August 16th. In conference today with Major Autry, Lt. Comdr. Olds, Capt. Rodgers and Lt. Col. Hudnall, of the Surgeon General's Office, all of whom share with us the delights and annoyances of procurement and assignment. A profitable day despite lack of success in some of the arguments which we advance and so away homeward making mention of the fact that the Albert Pike furnished a good meal even though the Colonel did disturb the swankiness of the establishment by asking for catfish. On the train meeting Madam President-elect Kosminsky en route Seattle who is agreeable to our suggestion that she return Kosminsky home and make him practice medicine.

August 20th. This night conversing with Amis who is temporarily domiciled at the Sir Francis Drake in San

Francisco, discovering that he is happy about the whole thing and has found several of the eating places for which this city is famous. This alone will contribute to his greater enjoyment.

"SPARE THE DOCTOR"

"Patriotism need not be limited to such things as driving slowly and saving one's toothpaste tubes," says Medical Economics. A 'Spare the Doctor' campaign might be promoted on similar grounds. Few people appreciate how many physicians are being siphoned off into the armed forces and how great an added burden this imposes on the doctor who remains at home. Few realize, therefore, that continued good medical service depends on helping the doctor to conserve his time. The more time the doctor can save in traveling to see his patients, the more time he will have to treat them.

Thousands of doctors are being called into military service. Thousands more will be called as the Army and Navy grow. So a doctor who stays home will have to take care of a great many more patients than in the past. The doctor will do his best. But there are only so many hours in the day, and each hour wasted means that an hour less can be given to people who really need attention.

Don't ask the doctor to make house calls when you are perfectly able to go to his office. Don't expect him to sit around and talk about extraneous matters. Don't try to turn a professional visit into a social occasion. The American people are used to the best medical service on earth—and they will continue to receive that kind of service if they give due consideration to the fact that the doctor is one of the busiest of men.—West Memphis News, May 29, 1942.

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Editorial Note: In a spirit of compliance with censorship regulations, rank and present addresses are omitted. It is appreciated that this list is incomplete and corrections will be welcomed.

BOOK REVIEWS

War Gases: Their Identification and Decontamination: By Morris B. Jacobs, Ph. D. Pp. 180. Price \$3.00. New York: Interscience Publishers, Inc., 1942.

This is a clear, concise summary of the literature on war gases which will be of help to lay persons active in civilian defense.

Management of the Sick Infant and Child: By Langley Porter, M. D., Professor of Medicine, University of California, and William E. Carter, M. D., Director, Out-patient Department, University of California Hospital. Sixth edition. Pp. 977 with 96 illustrations and 3 charts. Price \$11.50. Saint Louis: C. V. Mosby Company, 1942.

This useful and practical work has met with the practitioner's approval as evidenced by this, the sixth edition, is a valuable single volume book for all who practice pediatrics.

Manual of Standard Practice of Plastic and Maxillo-facial Surgery: Prepared and Edited by the Subcommittee Plastic and Maxillofacial Surgery of the Committee on Surgery of the Division of Medical Sciences of the National Research Council, and Representatives of the Medical Department, U. S. Army. 432 pages with 259 illustrations. Philadelphia and London: W. B. Saunders Company, 1942. Price \$5.00.

This is one of a series of manuals to be published for the benefit of the expanding military medical forces and for standardized instruction with emphasis on but

one technic. In these 432 pages the authors have given a worthwhile digest of the entire subject.

Surgery of the Ambulatory Patient. By L. K. Ferguson, A. B., M. D., F. A. C. S., Lieut. Comdr., M. C., U. S. N., etc., with a section of fractures by Louis Kaplan, A. B., M. D., F. A. C. S., Associate in Surgery, University of Pennsylvania. Pp. 923. 645 illustrations. Price \$10.00. Philadelphia: J. B. Lippincott Company, 1942.

This book discusses the ordinary conditions met with in general surgical practice and presents the methods approved by the authors for their care. The most recent knowledge is employed throughout. It is considered of especial value to general practitioners but can be profitably studied by all surgeons.

"The Modern Attack on Tuberculosis." By Henry D. Chadwick, M. D., and Alton S. Pope, M. D. Pp. 95. Price \$1.00. New York: The Commonwealth Fund, 1942.

Dr. Chadwick has discussed the current problems in tuberculosis control in the operation of an effective regional control program in an understandable manner. He has presented clearly the fact that in spite of steady improvement in diagnostic technique and facilities including the X-ray, the laboratory examination and the tuberculin test, that tuberculosis is not on the whole being diagnosed early.

"The Modern Attack on Tuberculosis" by Dr. Chadwick is a brief and authoritative discussion of ways and means to control and eventually to eradicate the disease. It should be very helpful to health officers, public health

Keep 'Em Flying

Keep 'Em Floating

Keep 'Em Rolling!



BUY DEFENSE BONDS AND STAMPS

nurses, and others concerned with community health, as well as physicians with responsibilities to tuberculosis patients.

Surgical Practice of the Lahey Clinic. Lahey Clinic: Boston, Mass. Philadelphia and London: W. B. Saunders Company, 1941. 897 pages with 376 illustrations. Price \$10.00.

This volume is a compilation of published articles from the Lahey Clinic and permits a review of these in one book. It is an excellent work from a skilled staff and should be in the library of every surgeon.

Communicable Disease Nursing. By Theresa I. Lynch, R. B., Ed. D., Instructor in Education, New York University. Pp. 678. Illustrated. Price \$2.75. Saint Louis: C. V. Mosby Company, 1942.

Each of the communicable diseases is presented with full discussion emphasizing the details of nursing care. Of interest is the history of these diseases and their effects upon mankind. The book will be most helpful to the nurse who cares for patients with communicable diseases.

Cancer of the Face and Mouth: Diagnosis, Treatment, Surgical Repair. By Vilray P. Blair, M. D., Sherwood Moore, M. D., and Louis T. Byars, M. D. Pp. 590. Illustrated. Price \$10.00. Saint Louis: C. V. Mosby Company, 1941.

A practical treatise on cancer of the face and mouth, this volume wisely stresses illustrations rather than text. Diagnosis, metastases, anesthesia and irradiation are adequately presented. The section of operative procedures fully describes and illustrates the various surgical procedures.

Health Education of the Public: By W. W. Bauer, B. S., M. D., Director, Bureau of Health Education, American Medical Association; Associate Editor of Hygeia. The Health Magazine; and Thomas G. Hull, Ph.D., Director, Scientific Exhibit, American Medical Association. Second Edition, Revised. 315 pages with 52 illustrations. Philadelphia and London: W. B. Saunders Company, 1942. Price \$2.75.

From a rich experience the authors have prepared a manual of technics for those professional persons who may need to assist in the health education of the adult lay population. Practical throughout, the book details the sources of material, its preparation, and its dissemination. A summary closes each chapter.

Carcinoma and Other Malignant Lesions of the Stomach: By Waltman Walters, B. S., M. D., M. S. in Surgery, D. Sc., F. A. C. S., Surgeon, Mayo Clinic; Howard K. Gray, B. S., M. D., M. S. in Surgery, F. A. C. S., Surgeon, Mayo Clinic; James T. Priestley, B. A., M. D., M. S. in Experimental Surgery, Ph. D. in Surgery, F. A. C. S., Surgeon, Mayo Clinic; and Associates in the Mayo Clinic and Mayo Foundation, Rochester, Minn. 576 pages with 143 illustrations. Philadelphia and London: W. B. Saunders Company, 1942. Price \$8.50.

This is the Mayo monograph on malignant lesions of the stomach and gives the opinions, procedures and results of this group. Detailed attention is paid to operative procedures, diagnosis, anesthesia and the management of the patient. Reading of the volume would bring a more optimistic view on gastric malignancy to the general profession.



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FINDING TUBERCULOSIS *

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Little Rock

Case finding has always been the foundation of any effort toward tuberculosis control, but now during these war times, it takes on an added importance when the conservation of manpower and womanpower is so vital. Any factor that is going to lower the efficiency of our fighting forces, or that is going to decrease the production of essential materials, or that is going to impair public health, should command our closest attention. President Roosevelt has said that the health of our people is our first line of defense, and it is to you physicians and to you interested volunteer workers that we must look to protect this line from tuberculosis. We on the home front should be more determined than ever to exert every effort to conquer this disease. When we see, here in Arkansas, what the government is doing to prevent tuberculosis from entering its ranks, what industry is planning to do at Marche and the Bauxite plant to prevent tuberculosis taking its place at the assembly line, we should take stock of our own civilian resources and see if we are making a sincere all-out effort to drive tuberculosis from our midst. It is important and it is our patriotic duty to find the open cases that are infecting our young men before they reach the induction station, and our young women before they reach the defense plant employment office.

I feel very highly honored in being asked to talk to you about "Finding Tuberculosis," and I was hoping to show my appreciation by bringing you some profound new thoughts, by saying something startling and spectacular that you have never heard before about case finding. However, it dawned on me that it was not the new unusual procedure that was going to get the job done, to find tuberculosis, but the old tried and true methods that we all know, that were

going to be effective in accomplishing our aim. And so now, at this meeting of physicians, tuberculosis association members, and ANTI-tuberculosis enthusiasts, I am going to run the risk of boring you by asking you to think with me about some of our old established facts as they apply today to our present case finding problem and our present national emergency.

For the past 60 years, since Robert Koch announced his discovery of the tubercle bacillus, men have been fighting to reduce the number of deaths from this disease. In the past 30 years, we have seen it drop from the greatest cause of death to seventh place. Now, just as a runner puts on a last burst of speed at the end of his race, so should we, with every ounce of energy that we possess, put forth our greatest effort and use every resource at our command to relegate tuberculosis to a place of minor importance as a cause of death within the next 10 years, in the last quarter of our race. This, then, is our goal, and right now the opportunity to accomplish our aim is banging, not knocking at our door, as it has never banged before. Now with the final control of tuberculosis in view on the horizon, is the time for us to take stock of our weapons, organize our forces, survey our obstacles, allocate our duties and plan our strategy. Certain it is that the finding of the active disease-spreading case is our greatest objective, for when these cases have been found and placed under supervision, we will have reached our goal. These cases are present and they must be found. In a recent report some of you may have read on a study of two groups of college students, some startling figures were brought to light. In one group, no examinations were made, but a record was kept of the number of cases that cropped up. In another group, examinations were made, and tuberculosis was **looked for**. Believe it or not, in the latter group, exactly seven times as many cases were found as in the group allowed to go unexamined. Mind you these figures obtain in a group above the average in health and in the social scale. Think what these figures mean to you physicians. They

* Read before the Sixty-seventh Annual Session, Arkansas Medical Society, Hot Springs National Park, April 28, 1942.

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mean that for every young person that comes to you because he is sick, because he has symptoms, because he has tuberculosis, there are seven and possibly more in whom you would have found tuberculosis had you looked for it. You lay workers, think that for every case of tuberculosis that "crops up" in your community, you would find seven more if an intensive case finding program were put on. I certainly hope that this report serves to illustrate the fact that tuberculosis is there if you look for it. Do not be like the ostrich and feel that if we do not see it, it does not exist. True, in many localities, tuberculosis is not as prevalent as in others, but many times when I have heard the statement, "We don't have much tuberculosis in our county," I wonder if it is really true that it is not there or if no search has been made. I feel that possibly the weakest spot in our whole offense against tuberculosis and the greatest obstacle to case finding is a lack of tuberculosis consciousness on the part of the public in general, and even in some members of the medical profession. And so, just as charity begins at home, so must we all start developing within ourselves an ever increasing awareness of the opportunities about us for finding cases. We must prepare ourselves mentally to look for it, for it IS there. We must assume a person has tuberculosis until we are sure he has not. We physicians must prepare for the actual physical work of examining, of skin testing, of reading films, of taking histories. You volunteer workers must prepare for the **year round** work involved in your educational programs, the talks, the mailing of literature, the soliciting of funds, the half mile walk off the road to take the educational charts to the rural school, the little further walk to urge this contact or that sick person to see a doctor. We must build up our own ranks before we are ready for a case finding program that will be efficient and effective.

I think that those of us here today accept our responsibilities and share a common enthusiasm, or we would not be here, but it is necessary that we spread some of our enthusiasm, some of our knowledge, throughout our own communities and among our own associates.

Thus after preparing ourselves, the second thing to do in finding tuberculosis is to prepare the public, make them more tuberculosis conscious than they may already be. Show them how tuberculosis can affect our war program by rendering a selectee unfit for service. Show them how it can affect their communities by de-

creasing their laborers and their earning power, and show them how their own lives may be changed by tuberculosis entering their homes. Show them how it can affect that most tender spot of all, their pocketbooks, by causing them to spend needless millions in taxes to pay those \$4,000 bills that each case of tuberculosis costs them. The ramifications of bringing about a tuberculosis consciousness in the public are so many that time permits mention of only a few. Probably the most important work that a lay group could do would be to make talks and stimulate interest among the various groups in their community, make them see why a tuberculosis free community benefits them. For instance, heads of industries and businesses should be shown how a healthy personnel with increased working capacity means dollars in their pockets, and how illness in their workers subtracts from their profits. It should be pointed out that if the government, defense industries and such concerns as General Motors, and Chrysler Corporation, and various unions have found that it is an economical procedure to routinely X-ray their new employees, that surely such a program would be beneficial to their business. Service clubs, such as Rotary, Lions, Kiwanis, could be interested even more than they are now. Womens' study groups should be approached with a view to having them study tuberculosis instead of South American customs or Beethovens nine symphonies. Parent-Teacher Associations, usually active and usually interested, can be encouraged to take the lead in having a study of tuberculosis made part of the school curriculum, and especially in the high school. College groups are very interested, and most of them are eager for the opportunity to be taught. School boards can be urged to make it compulsory that teachers submit an X-ray as part of their annual health certificate before their contract can be renewed for the next year. Community leaders should be contacted with a view to getting their support in working to get their county to be an accredited county. For those of you who are not familiar with this plan, let me say briefly that it is a plan whereby a county receives a certificate from the State Department of Health, the State Medical Society, and the State Tuberculosis Association if they meet certain requirements. These requirements are that they have a death rate of less than 10 per 100,000 and a record of less than 15% positive reactors to the skin test among all the high school seniors. Many of our own counties would have a good chance of

qualifying for this if sufficient community interest were aroused.

In addition to the talks and the study plans, moving pictures should be shown at every opportunity, not only at seal sale time or early diagnosis campaign time. Newspaper articles should be run as often as possible, and educational programs should be outlined for the schools where our charts and literature could be used, essay contests planned throughout the year, and the study of tuberculosis taken up in each hygiene class.

In addition to all this, special emphasis should be placed on certain groups where tuberculosis is most prevalent or most important. I have in mind the mine workers, those working in dust, the industrial workers, and food handlers.

The value of skin testing programs in arousing public interest should not be discounted or overlooked. While the number of cases found among the positive reactors may not be great, the number of cases found as a result of interesting the parents or stimulating public demand for more X-ray work, will more than pay for the initial work and material cost. A skin testing program will cause many X-rays to be taken that would be neglected otherwise, and any procedure that will result in this is good. All of these methods mentioned for arousing tuberculosis consciousness in the public lie well within the province of the voluntary organizations.

The practicing physicians in a community certainly have their place in conditioning public reaction. Ordinarily they are influential and most of the populace respect their opinions. These physicians should use every power at their command to bring about a greater awareness of the tuberculosis problem, and the necessity for finding new cases. Further than this, they should train themselves not only to consider tuberculosis as a possible diagnosis in each case they see, but also to render themselves more skilled in its diagnosis. Dr. Riley has issued a standing invitation to the physicians of the state to come to the Sanatorium and refresh their knowledge of tuberculosis. They are given the opportunity to review films, do chest examinations, sit in on staff conferences and do everything that would make them more competent in the diagnosis and treatment of tuberculosis. The time should not be far off when each county or each community is conducting its own case finding program with its own personnel and facilities. The State Board of Health is ready and willing to give every possible practical assistance, but

in the last analysis it is a local responsibility to be handled in cooperation with the local health units. I am happy to say that some of the counties through their county health officer and with the help of the private physicians, are already carrying on independent, adequate case finding programs. Recently through the cooperation of the Selective Service Board and the Induction Station at Camp Robinson, names and addresses of rejected selectees are being sent to their home county. These men will go to either their county health office or their private physician for advice, and aside from treating and counseling this individual, both should take the responsibility of finding from whom he has gotten his infection, and to whom he has given it.

Volunteer workers, physicians and parents should encourage the compulsory examination of college students. They should demand of their school boards that such examination be a requirement for admission. When the time comes that public demand has resulted in adequate facilities being available, they should insist upon similar examinations for high schools.

Unfortunately, I believe that we are not taking full advantage of all the diagnostic facilities that are now available. Too many times have I gone in to your counties and found that a patient with far advanced tuberculosis has been waiting several months for the mobile X-ray unit to come to establish a diagnosis when a sputum examination could easily have been done in the beginning. If you live in a location where X-ray facilities are not to be had, use these other diagnostic aids, or see that means are provided for the patient to go where he can get an X-ray. If in your locality, the funds for providing X-rays are limited, use your history of the case, the presence of symptoms and the results of your chest examination in determining whether or not to spend your meager funds for an X-ray for that particular patient. You will find that if you do this, you will get a greater return of active cases for the number of films taken.

Some mention should be made regarding the physician's responsibility over and above the actual care of his patient. For instance, I know of a case where a mother was being treated for tuberculosis over a period of two years. She was a terminal case, and for **her** everything medically possible was being done. **SHE** was receiving the best of care. However, no thought was given to the treatment of her family. They were not examined. Soon after the mother's death, the daughter was diagnosed as having

active tuberculosis and is now, I believe a patient in the Sanatorium. A few months ago, the son had a hemorrhage, and he is a patient in Booneville. Both of these cases might have been prevented if treatment had extended above and beyond the patient in the bed, and preventive as well as remedial medicine had been practiced. This tuberculosis should have been found at its beginning, rather than after symptoms had appeared.

Conspicuous by its absence is my mention of finding tuberculosis in the negro. This is not because it is unimportant, but because no differentiation should be made in the energy we exert to find tuberculosis in the white, and the energy we exert to find it in the negro. With its susceptibility to tuberculosis so pronounced, the negro race will stand as a reservoir of infection for the whites as long as we have them working in our homes, working in our fields, caring for our children, cooking our food, unless we are equally diligent in finding and caring for their tuberculosis. Case finding in the negro is, therefore, of the utmost importance to our own interests and no effort should be spared to decrease the incidence of tuberculosis in the negro as much as or more than in the whites.

So when we have first prepared ourselves, secondly aroused public sentiment and interest, and thirdly when we are making full use of the diagnostic facilities at our command, THEN are we ready to start finding tuberculosis on an effective scale. And so I say to you that a firm foundation must first be laid before we are ready to build a case finding program that is going to be of telling proportions. The positive diagnosis is the end result of our case finding efforts, and each of us has his part to play. Some of these parts may be small, it is true, but they are none the less important. On an airplane assembly line, one person may have just one bolt to turn, one rivet to put in place, but which is necessary to the finished product. Even though your particular part in finding tuberculosis may be small, perhaps taking one X-ray, examining one patient, taking a patient to the doctor, or passing out tuberculosis literature, it is important, and it is the combination and integration of all of these small activities that is going to result in finding more tuberculosis. There is no job too trivial, no job too difficult, if it is going to result in finding a new case. There is no easy way that I know of, of picking an active case of tuberculosis out of thin air. We must use every resource at our command.

We of the Health Department are seeing more and more that finding active tuberculosis is not easy. When we first started our program in 1938, we found that during our first year, 6.8% of those examined could be classed as active cases. During the following two years, by carefully selecting those for examination, the percentage rose to 10.4%. This year, with even more careful selection, the percentage is dropping considerably. It would be so easy to be lulled into a sense of complacency and smugness because of this drop, and it would be so easy to take the attitude that now we have held three or four clinics in each county, and are finding fewer cases, that we have almost reached our goal of finding **all** the tuberculosis there. Such an attitude however, would be a threat to our entire program, for I cannot help but feel that such a decline in cases should not make us more contented with our work, but should serve as a challenge to our resourcefulness and diligence. In my conferences with the local health departments, I have taken the stand that the easy work has been done. We have X-rayed the person that the whole town knows has been sick for three years, and has tuberculosis. We have X-rayed tuberculous Mr. Smith's widow and five of his six children and found one or two cases. Now those lush days of easy case finding are over. With 1,000 people dying of tuberculosis in our state yearly, we know that there are many, many cases yet to be found. We know that as the death rate becomes lower, these cases are going to be harder and harder to find. Now is the time we must get to work and scratch and dig for them. We must examine Mrs. Jones who is not ill all the time, but is up and down, having her spells, taking her tonics. We must examine Mr. Smith's sixth child who was out of town the day the rest of the family was examined. The official agency, the local health units, can not do this alone, but must have the help of the practicing physicians and the volunteer workers. They are the ones that should be responsible for changing Mrs. Jones story from, "I feel bad so much of the time, I don't know what's wrong with me, but know I do not have tuberculosis" to "I feel bad so much of the time, I do not know what's wrong with me, I MIGHT have tuberculosis." When Mrs. Jones changes her story, WHEN Mr. Smith's son feels that an examination is worth staying in town for, when Mrs. Brown spends her money for an X-ray instead of a "good general blood tonic," then, we are ready to do more than scratch the surface in finding tuberculosis. The influence of the family phy-

sician is of inestimable value in educating people to the necessity for examination. Only last week, I had the common experience of telling a father that Junior should be X-rayed because he had a positive skin test and a history of contact with known tuberculosis. The father said, "Do you really think it is necessary, there does not seem to be anything wrong with him." When I explained why I thought it was necessary, he said, "Well, Doctor So-and-So has taken care of him all his life, I think I will go over and see what he says." Before I left town that day, that father was back and said, "Doctor So-and-So thinks he should be X-rayed too, so where should I take him?" This same story happens time after time, and shows the need for the sponsorship of the private physician, if we are to be successful in our search for new cases. The same tale applies too to you association workers. Often I hear a story like this: "Well, I think I'll go and see Mrs. Green. She has a brother in Booneville, and she was examined once when she was up there, visiting, and she sells Christmas seals, so she knows quite a bit about tuberculosis. I think I will see what she says." **Believe me**, when you who are the Mrs. Greens in your community are approached like this, you had better know something, and it is your duty to inform that patient. This is one of the small bolts **you** must turn to help find tuberculosis.

So you see, finding tuberculosis is not the start of our program, but comes only after we have prepared the public and prepared ourselves to find it. True we shall continue to find cases by examination of contacts and suspects, but only too often is it like pulling teeth to get them in for examination. When the time comes that these contacts, these suspects, industrial workers, high school and college students come and **request** a skin test, an X-ray, a sputum examination, **then** will we be ready to do some real work in finding tuberculosis. Until this is done, we must go on and make the best use we can of the personnel and the tools that we have. We must take full advantage of the information furnished us by the draft boards and induction stations, and the reports from the defense plants that will undoubtedly be forthcoming. We must investigate and educate and re-examine those rejected from service or employment. More X-rays must be taken, more skin tests done, more sputum examined. In our search to find new cases, let us keep our enthusiasm and our ambition at a high level. Now that the race is almost won, now that the next ten years will probably see tuberculosis as of minor importance

as a cause of death, let us not be guilty of giving too little of our energies, of our knowledge; let us not be sparing of whatever talent or skill each of us may possess, no matter how small. Let you volunteer workers educate, prepare the field of public sentiment; let you physicians advise and diagnose and reap the harvest of new cases. Let us **ALL** take full advantage of the new opportunities for case finding given us, let us use all the facilities we have. Let us here today realize the importance to our war effort of finding unknown tuberculosis that exists, the importance of protecting our selectees and workers from **contacting** and contracting tuberculosis. We must be resolved to put forth an all-out effort to find new cases, effort that is going to spell victory over tuberculosis within the next ten years.

CONFERENCE ON VENEREAL DISEASE CONTROL NEEDS IN WARTIME

Venereal disease and America's war effort will be discussed by high-ranking medical officers of the War and the Navy Departments, prominent physicians, health officers and others at a Conference in Hot Springs National Park, Arkansas, October 21-24, 1942. Headquarters will be at the Arlington Hotel.

The Conference will be held under the auspices of the United States Public Health Service in conjunction with the Eighth Annual Meeting of the American Neisserian Medical Society. Surgeon General Thomas Parran will preside. State and local health officers, venereal disease control officers, practicing physicians, and all others engaged in venereal disease control activities are urged to attend.

Subjects for discussion will include venereal disease control measures influencing the war effort, epidemiology of syphilis and gonorrhea—1942, wartime venereal disease control education, research influencing the wartime venereal disease control program, and technics of venereal disease education.

Governmental, professional and health organizations to be represented at the Conference include: the War Department, the Navy Department, the Social Protection Section of the Office of Defense Health and Welfare Services, the American Medical Association, the American Neisserian Medical Society, the American Social Hygiene Association, state and local health departments, and the United States Public Health Service.

CARE OF THE SIMPLE HEAD INJURY *

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Denver, Colorado

In order to prevent simple head injuries from becoming complicated, all patients with head injuries should be handled gently, examined frequently, and given the best nursing care. By these procedures the physician may early discover the need of specific medical and surgical measures which will diminish the severity of the injuries. Symptoms which appear severe at first will often prove to be of minor importance if properly evaluated and quickly treated. Stupor, or even coma, of short duration may not indicate a severe injury; but increasing stupor and coma are frequently evidence of increasing intra-cranial pressure and may be the first sign of developing complications.

First Aid

Proper handling of these patients immediately after injury will often prevent severe complications. They should be treated as though they were exceedingly fragile and should be moved with the care given to a valuable scientific instrument. Since simply jarring the head will produce shock, the amount of care necessary in transporting a patient with an undetermined head injury cannot be underestimated.

Signs and Symptoms

In order to institute adequate treatment quickly, the physician must properly evaluate signs and symptoms.

Stupor and Coma. Often when these patients are first seen they are in a stupor or coma. This state in itself is of little importance; but if it is prolonged or progressive, it may prove a valuable sign. Increasing coma associated with other changing signs may be evidence of increasing intra-cranial pressure from intra-cranial hemorrhage or severe cerebral edema.

Decreasing stupor and coma associated with improving neurological signs is evidence of lessening intra-cranial tension and of general improvement.

Reflex, Sensory, and Motor Signs. A progressive paralysis of even one extremity associated with other increasing signs is further evidence of progressively increasing intra-cranial pressure. Changes in reflexes and in motor and sensory function, as well as changes in the cranial nerves,

should be carefully observed during the first few days after the injury. By frequent careful neurological examinations such changes can be discovered and evaluated. Gradually increasing paralysis and sensory dysfunction are evidences of increasing intra-cranial pressure, while improving neurological signs are evidences of general improvement.

The significance of the pupillary reactions is often valuable in determining progress. A gradually dilating pupil is evidence of unilateral bleeding or of increasing intra-cranial pressure on the side of the dilating pupil.

Restlessness. The significance of restlessness, which is often present at the time the patient is first seen must be evaluated. In a mild form in elderly patients it may be lifesaving because of its assistance in the prevention of hypostatic pneumonia. Mild restlessness is occasionally seen in patients who have had little nourishment for a day or two or who have a distended bladder. However, if the patient is exceedingly restless or maniacal, he must be quieted and must be protected against personal injury.

Convulsions. Convulsions in mild head injuries are rare, yet they do occur. They have little significance except when associated with other evidence of brain damage. They are easily controlled and usually disappear after the cerebral healing processes have taken place.

Headache. Since conscious patients usually complain of headache when they are first seen, it may be possible to discover early on which side of the brain there is severe swelling or hemorrhage, for the pain is usually on the side of the lesion.

Temperature. These patients rarely have a temperature elevation on admission to the hospital. However, if there is blood in the spinal fluid, they may have a rise of temperature of one or two degrees on the following day. As soon as the hemoglobin is absorbed from the spinal fluid, the temperature in the uncomplicated case will return to normal.

Pulse. Since the character of the pulse is the most reliable index of the progress of a head injury, frequent examinations should be made.

The character of the shock pulse is well known; it is weak, rapid, and fluctuating in nature and varying greatly in intensity, being at times almost imperceptible. For a few days after head injury, the pulse is usually regular but rapid; this is not evidence of cardiac failure or

* Presented at the Seventy-eighth Semi-Annual Meeting of the First Councilor District Medical Society, Jonesboro, October 15, 1941.

cardiac embarrassment, but a pulse change resulting from brain injury and central stimulation. When there is a slow severe rise in intra-cranial pressure, the pulse may be regular and pounding as is seen in extreme arterial hypertension.

Cyanosis. When a rapid regular pulse is associated with cyanosis, it may be due to either cardiac failure or to greatly increased intra-cranial pressure with impairment of the respiratory center. In the presence of cardiac failure, edema of the extremities, dilatation of the heart, and other evidences of decompensation will be found. Where cyanosis is related to impairment of the respiratory center, an associated Cheyne-Stokes or stertorous type of breathing usually appears.

Blood Pressure. The character of the pulse is probably the most valuable sign in evaluating the progress in a case of head injury, but an increasing blood pressure is also evidence of rapidly increasing intra-cranial pressure and demands careful evaluation. The diastolic pressure may often be found to rise more rapidly than the systolic pressure. The result is a low pulse pressure which is further evidence of developing cerebral decompensation.

Shock. In the care of a head injury, the appearance of shock during the first 24 to 48 hours is most important. Its severity is proportional to the severity of the head injury or to the care with which the patient has been handled during the early stages of his injury. The patient in severe shock, is pallid, and usually has a weak flighty pulse with low blood pressure and small pulse pressure. His breathing may be shallow and irregular, and his general body functions may be temporarily diminished, making him cold and clammy.

Treatment

Prevention of Shock. The importance of proper handling was discussed under First Aid. Specifically, these patients should not be moved until enough help is available to move them with a minimum of jostling and jarring. They should never be permitted to walk, but should be laid on a stretcher and lifted from stretcher to bed. One should always remember that after a head injury further jarring of the head will produce shock.

Warmth. If the patient has not been properly cared for, he should be made warm on admission to the hospital by whatever methods are available. Warm blankets, hot pads, hot water

bottles, or even heat cradles should be used. If the patient is unconscious, it is important, of course, not to burn him.

Stimulants. If shock is severe, stimulants such as coramine, adrenalin, ephedrine, or caffeine may be given. This group of stimulants can be given hypodermically. Coffee is easily available and may be given either by mouth or as a retention enema in the home or hospital; it supplies three major essentials in the treatment of shock; caffeine, warmth, and fluids.

Fluids. It is vital in head injuries that fluids be administered properly. Since the introduction of the dehydration therapy as expounded by Fey, many physicians routinely limit or discontinue fluids to these patients on admission. This is a procedure so full of danger that it should be discontinued. In substitution for the routine dehydration of head injuries, one must develop a rational plan.

Primarily, fluids should be administered for the treatment of shock and for nourishment. They should be restricted only in the presence of developing severe intra-cranial pressure and severe cerebral edema.

Where shock is present, subcutaneous or intravenous fluids or blood transfusion should be used as indicated from the severity of the symptoms. During the period of shock, no type of dehydration therapy should be given. If the patient's clinical course is one of progressive improvement, fluids should **always** be administered until a normal fluid balance is reached.

Fluids should be limited only when severe cerebral edema develops or when there are other causes of rapidly increasing intra-cranial pressure. The clinical evidence of these phenomena is increasing stupor or coma, dilating pupil, increasing unilateral paralysis with associated reflex changes, of lack of general improvement.

Quiet. More shock and more cerebral damage may take place if these patients are not kept quiet. As explained previously, the restless patient may need to have his bladder emptied, or may need to be given nourishment. Most patients, if made comfortable in bed with the room darkened and visitors excluded, will become quiet. Restraints that protect the patient and do not limit his activity are desirable. The strait jacket or wristlets will often cause the stuporous patient to become wild, while side frames or side canvasses will allow him to rest.

Sedatives. It is occasionally necessary to give sedatives to restless patients after head injury.

Morphine has never proved adequate for this purpose as it increases intra-cranial pressure and also depresses respiration. Its use in the presence of cerebral injury is dangerous. I have seen many patients who have been given morphine to keep them quiet during transportation and in no case have I ever seen the patient relaxed and quiet. Morphine is avoided in acute abdominal conditions; it should likewise be avoided in all head injuries.

Where it is important to give a sedative by hypodermic injection, sodium phenobarbital is the ideal drug. Other drugs such as phenobarbital, chloral, or paraldehyde may be given by mouth or by rectum. In cases of mania or convulsions, small amounts of chloroform may be inhaled.

Oxygen. Recently 100% oxygen has been shown to be a major adjunct in the treatment of head injuries and post-operative intra-cranial conditions. Small amounts of carbon-dioxide in the gas have been shown to double or triple the existing intra-cranial pressure and, for this reason, should **not** be included with the oxygen. Furthermore, oxygen alone has been shown to combat shock and decrease intra-cranial pressure. It is important that the pure oxygen be given by a mask from which there is no escape of oxygen. The beneficial effects are observed only when the patient has received a high concentration continuously for 24 to 48 hours.

Spinal Puncture. Spinal puncture is rarely needed in mild head injuries; it should be avoided as a routine procedure and used only where there are specific indications. Unless the knowledge of the contents and pressure of the spinal fluid is vital, the patient should not be subjected to this unnecessary procedure. However, in the conscious patient with a headache, it is occasionally possible to obtain marked relief by daily removal of spinal fluid; but this procedure should be followed only if it is specifically needed.

X-rays. X-rays of the skull in minor head injury are rarely of vital importance. There is little need of subjecting the patient showing signs of shock to the trauma entailed in the examination, for it is rarely possible to operate on a patient in shock and X-rays are used primarily as a guide to surgical procedure. Fracture of the skull alone is of little significance either in treatment or prognosis.

Medico-legally, X-rays of the skull have received undue importance. Many insurance companies will pay higher compensation rates if a

fracture of the skull can be seen. But, brain injury is not so likely to be related to skull fracture as it is to the character of the blow and the object producing it. The process of injury of brain structures may be understood better if one compares the brain and skull to a cigar box filled with jelly. If the box is shaken severely, the jelly will rupture and the box will not be injured. However, if one shoots a .22 bullet through the box, the box itself will be shattered, but there will be very little injury to the jelly mass.

Nursing. If these patients are properly nursed, they experience few untoward symptoms such as headache or restlessness, and have a greater chance of survival. Adequate nursing care means that the patient is observed constantly, that he is turned often, and that frequent records of pulse, temperature, blood pressure, and general physical state are made. If the patient is comatose, frequent turning will prevent the development of bed sores and of hypostatic pneumonia, and will improve breathing and the general condition. During the first 24 to 48 hours after a head injury, changes are so rapid that unless the patient is constantly watched, he may quickly develop serious complications which will make treatment difficult. Unless specially trained nurses are available, the physician in charge should see the patient himself four or five times the first day in order to follow his condition and to insure adequate nursing care. Such patients should not be entrusted to individuals who do not realize the seriousness of the injury and the importance of reporting changes as rapidly as they occur.

Feeding is an important nursing problem in a comatose patient. For example, if the patient is paralyzed on one side, it will be exceedingly difficult for him to swallow fluids when he is lying on that side. If, however, he lies on his unparalyzed side, swallowing may be accomplished easily. If this patient has difficulty with the act of swallowing, fluids should be placed in the back of his throat so that the swallowing reflexes will be initiated and absorption will take place. It is often difficult to get a spoon in the mouth. However, if one will use the Breck feeder and constantly place small amounts of liquids in the back of the throat, large amounts of fluids can be administered.

The nasal tube may be used where there is marked swallowing difficulty. Usually these patients also have difficulty with the mucus in their throats. For this reason, it is unwise to leave the nasal tube in permanently as it increases the

mucus secretions and the danger of pneumonia. The nasal tube should be passed, a feeding given, and the tube then removed.

Individualization of the Case

The need for individualization of all cases of head injury is obvious. No set plan of treatment can be followed and no rules can be set up because cases are varied in their severity and complications. The first case may need only to be kept quiet in bed, but the second may require every method of treatment.

Complications

The complications of a head injury are numerous and should be considered separately. However, if the above-mentioned methods are strictly adhered to, complications are early evident, and their immediate treatment can be begun.

Conclusion

Finally, the proper treatment of head injuries requires an understanding of the changes in symptoms and signs and skill in the selection and application of the proper method from among the many methods available in the treatment of these conditions.

PEPTIC ULCER FILM AVAILABLE

There is now available for free showings before groups of physicians the first complete movie film on peptic ulcer, in color and with sound track.

The film is entitled "Peptic Ulcer" and was produced under the direction of the Department of Gastroenterology of the Lahey Clinic of Boston. The American College of Surgeons has awarded its seal of approval to the film.

Running time of the film is 45 minutes, 1600 feet of 16 mm. film, and covers a presentation of the following problems of peptic ulcer: Pathogenesis, diagnosis, treatment, pathology, complications, including obstruction, hemorrhage, and perforation, gastric ulcer, surgery and jejunal ulcer.

Arrangements for a showing of the film may be made by writing to the Professional Service Department of John Wyeth and Brother, Inc., Philadelphia, who will provide projection equipment, screen, film, and operator for medical groups, without charge.

FOR SALE—One bacteriological incubator, size 18 by 18 inches, in good condition. Mrs. Carl G. Davis, 1007 East 8th Street, Little Rock, Arkansas.

THE IMPORTANCE OF SPECIFICATION

Some physicians think it is commercial to specify a maker's name.

On the other hand, a physician of international reputation and unimpeachable standing has expressed himself as follows:

"I invariably specify Mead's whenever I can, because I feel that when I don't specify a definite brand, the effect may be the same as though I were to specify that any brand would do.

"By not specifying, I let down the bars to a host of houses, many entirely unknown to me and others deserving no support at my hands.

"When I specify Mead's I may be showing favoritism, but at least I know that I am protecting my results. If, at the same time, my self-interested act encourages a worthy manufacturer to serve me better, I can see no harm in that."

Mead Johnson & Company, Evansville, Ind., U. S. A., have to depend upon the physician to specify MEAD'S because they do not advertise or "merchandise" their products to the public.

Doctors can be of great assistance in the "salvaging campaign" now being carried on throughout the country, by gathering up all their old discarded instruments and contributing them to the pool. For the most part these instruments are made from a high quality of steel and scrap steel, along with other scrap metals, which is one of the most needed things right now. As a matter of further interest, many of these instruments bear the imprint, "made in Japan." A good many years ago the country was flooded with Japan-made instruments, and it would be quite a gesture to return these to that country with our best compliments—in the form of war materials, of course.—Journal of the Indiana State Medical Association.

If you used any of these "Jap" instruments, you will want to send them back this way.

COMING MEDICAL MEETINGS

First Councilor District Medical Society, Jonsboro, October 8th.

Fifth Councilor District Medical Society, Camden, October 13th.

Southern Medical Association, Richmond, Virginia, November 10-12th.

The President's Page

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NATIONAL CONFERENCE OF PRESIDENTS OF STATE MEDICAL SOCIETIES CANCELLED

The Conference of Presidents of State Medical Societies which was to have been held October 5th at Hot Springs National Park has been cancelled. Our Society was to be host to this meeting. We had sixteen enthusiastic acceptances, but we did not feel that this number would be sufficient to justify holding the meeting.

The pressure of war work among doctors; difficulties of transportation, especially air travel; the nearness of the meetings of the Southern Medical Association and the American College of Surgeons; the fact that a number of the State organizations were meeting on or near our date; all of these were reasons for our decision in cancelling this meeting.

It appears that it will become more and more difficult to hold conventions as the war progresses. Some of the States are not having their regular annual meetings, but are confining their sessions to a one-day session of the house of delegates only.

Doctors must keep step with medical progress during the war. This will be done more and more through the medium of literature rather than through conferences and conventions.

R. B. ROBINS, President.

THE JOURNAL

OF THE

ARKANSAS MEDICAL SOCIETY

Owned by the Arkansas Medical Society and Published
under direction of the Council

W. R. BROOKSHER, M. D., Editor

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NEWS—Our readers are requested to send in items of news, also marked copies of newspapers containing matter of interest to the membership.

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EDITORIALS

MENTAL CONFUSION FROM THE SULFONAMIDES

The Journal previously has called attention editorially to the danger of impaired judgment which sometimes results from sulfanilamide administration. Now the Committee on Disability and Rehabilitation of the Medical and Surgical Section of the Association of American Railroads re-emphasizes this hazard. Investigation reveals, this report states, that there is frequently a period of confusion following administration of any of the sulfonamide group of drugs. Hence it is recommended that a patient, after receiving treatment of this type, should be free from work for seven to fourteen days following such administration before being permitted to resume duties in either engine or train service. The possibility of serious mental confusion must be borne in mind especially for those whose activities under circumstances of impaired judgment would be particularly hazardous to others. This would include many occupations in civil life and practically all those in military fields.—J.A.M.A., August 22, 1942.

MEDICAL OFFICER RECRUITING BOARD

Arkansas' immediate quota of physicians for the military service having been obtained, the Medical Officers Recruiting Board established in Little Rock, May first, has been discontinued. Arkansas physicians may feel proud that the patriotic response has been such that no further immediate need exists for the Board to continue its activities. For this splendid response to the military needs of our country, The Journal voices appreciation to the many physicians who have volunteered; to the county procurement and assignment committees who have worked diligently and earnestly; to Lt. Comdr. Edwin L. Olds of Selective Service, ever ready to lend sympathetic aid, and lastly, to Major Daniel H. Autry, Captain Clyde D. Rodgers and Captain Shiller F. Shore, who bore the brunt of the labor, being forced to do must army paper work when all the while their desire was to serve the country more in the capacity of military officers. To all—hearty thanks!

Pending notification of the proper procedure, those additional physicians who may wish to volunteer for military service are advised to notify the State Procurement and Assignment Chairman, who will assist them in securing appointments.

DISLOCATION OF PHYSICIANS FOR CIVILIAN PRACTICE

103 Arkansas physicians signified on the Procurement and Assignment enrollment form that they would prefer as their first or second choice for service during the war emergency, a willingness to be dislocated from their present localities to serve in some other civilian capacity or community during the war. Letters asking for confirmation of this expressed intention have been mailed each of these physicians from the office of the Arkansas chairman, Procurement and Assignment. Of the replies received to date, only two physicians are now willing to make a change of location. Whether this be due to a misunderstanding of the original enrollment form or to a change in the local situation since the form was submitted is not known. However, there exists a definite need for additional physicians in certain sections of the state, particularly in industrial activity. Physicians who wish to enter into defense work or who may wish to change location are urged to advise the state chairman of Procurement and Assignment, W. R. Brooksher, Fort Smith, giving details of training

and type of work desired in order that communities or industries who need physicians may expedite their efforts to obtain them.

EDITORIAL COMMENT

1943 REGISTRATION FREE

1943 registration fee to The State Medical Board of the Arkansas Medical Society will be due from November 1st to December 31st, 1942. After January 1st, 1943, there will be a penalty assessed against all members who have not paid their 1943 registration fees. The penalty is assessed by law. Send all fees to Dr. D. L. Owens, Secretary, Harrison, Arkansas.

All physicians who have entered the armed forces of the United States during the year 1942 will have their 1943 fee waived and subsequent fees will be waived so long as the United States is at war. Following each physician's discharge from the armed forces, the regular fees will become due for the years following such discharge.

COMMUNIQUE

To the Editor:

In reply to A Side Thought by C. E. Dungan in the September Journal, I would suggest that since same medical schools now require two years' internship (or do they?), that our medical school shall, before granting a final diploma, compel its graduates, after at least one year of general internship, to spend one year in general practice in a community at least ten miles distant from an incorporated city in Arkansas of a population of 5,000 or more. Of course, those men entering the armed forces would be excused from this requirement for the duration.

This would not only discourage men from other states from taking the place of Arkansas boys in our medical school, but would also, in a small way, repay the state for educating out-of-state men and, last but not least, I believe it would produce better doctors and help them decide their future course more sensibly.

Calvin A. Churchill, Capt., M. C.,
United States Air Force,
Bowman Field,
Louisville, Kentucky

P. S. Hello, you "worry warts" back home, why don't you join up and quit worrying? Your blood pressure will benefit if your pocketbook doesn't and old coronary arteries will stay healthy longer. C. A. C.

PROCEEDINGS OF SOCIETIES

The Sebastian County Medical Society met September 8th for the following program: "Ophthalmology in the Present War," Major Steffins, and "Otolaryngology in the Present War," Lt. Kramer, both speakers of Camp Chaffee.

W. F. Adams, Secretary.

The Southeast Arkansas Medical Society met in Crossett in August as the guests of C. E. Spivey. Speakers on the scientific program were F. Walter Carruthers, M. J. Kilbury and Robert Watson, all of Little Rock.

The Craighead-Poinsett County Medical Society was addressed September 7th by J. H. McCurry, Cash, on "Tact and Art in the Practice."

The Ouachita County Medical Society met in regular monthly session Thursday night, September 3, at the Ouachita Hotel in Camden with Drs. J. S. Rhinehart and C. S. Early as hosts. The program consisted of a paper on "The X-ray in Obstetrics" by Dr. D. E. White, El Dorado.

R. B. Robins, Secretary.

Brooks R. Teeter, Russellville, has been appointed Lieutenant, Medical Corps, Army of the United States, and assigned to Camp Claiborne, Louisiana.

G. D. Murphy, Jr., El Dorado, has been appointed Lieutenant, Medical Corps, Army of the United States, and assigned to Jefferson Barracks, Missouri.

John H. Pinson, Jr., El Dorado, has been appointed Lieutenant, Medical Corps, Army of the United States, and assigned to Morrison Field, West Palm Beach, Florida.

A. L. Goatcher, Plummerville, has recovered from a long illness and resumed practice.

W. W. Chamberlain, Hot Springs National Park, has been appointed Major, Medical Corps, Army of the United States, and assigned to Air Force, Jacksonville, Florida.

W. J. Schwarz, Lake Village, has moved to Little Rock.

Raymond Cook, Little Rock, has been called to active duty as Lt. Comdr., Naval Medical Corps, and assigned to Naval Hospital, Pensacola, Florida.

Capt. Carroll F. Shukers has been transferred from LaGarde General Hospital, New Orleans, for duty with the 1st Medical Laboratory, Camp Rucker, Alabama.

E. G. Burt, Crossett, has been appointed Lieutenant, Medical Corps, Army of the United States, and ordered to duty at Camp Berkeley, Texas.

T. Duel Brown, Little Rock, has been appointed Major, Medical Corps, Army of the United States, and assigned to Air Force Technical School, Lincoln, Nebraska.

Hollis H. Buckelew, Little Rock, has been appointed Captain, Medical Corps, Army of the United States, and assigned to Army and Navy General Hospital, Hot Springs National Park.

John Stathakis, Little Rock, has accepted appointment with the Veterans Administration, Lincoln, Nebraska.

Friedman Sisco, Camp Bowie, has been promoted to major.

F. G. Engler, Little Rock, has been appointed Wing Personnel Officer, Arkansas Wing, Civil Air Patrol.

PERSONALS AND NEWS ITEMS

Chas. H. Lutterloh, Hot Springs National Park, has been called to active duty as Major, Medical Corps, Army of the United States, and assigned to Air Force Replacement Center, Saint Petersburg, Florida.

Paul Z. Browne, Hot Springs National Park, has been called to active duty as Major, Medical Corps, Army of the United States, and assigned to Headquarters, Eighth Service Command, Fort Sam Houston, Texas.

H. K. Carrington, Magnolia, has been called to active duty as Captain, Medical Corps, Army of the United States, and assigned to Hunter Field, Savannah, Georgia.

Jerome F. Brownson has moved from Leachville to Blytheville.

John William Smith, Little Rock, has been called to active duty as Lieutenant, Medical Corps, Army of the United States, and assigned to New Castle County Airport, Wilmington, Delaware.

Glenn H. Johnson has been appointed acting head of the Department of Gynecology, University of Arkansas School of Medicine.

Carroll F. Shukers, Little Rock, has been called to active duty as Captain, Medical Corps, Army of the United States, and assigned to LaGarde General Hospital, New Orleans.

"Injuries to the Knee Joint" by F. Walter Carruthers, Little Rock, appeared in the August, 1942, Surgical Clinics of North America.

BORN—On July 7th, a daughter, Kathryn Ann, to Dr. and Mrs. T. Duel Brown, Little Rock.

Dr. and Mrs. M. E. Foster, Fort Smith, spent a September vacation in Colorado.

Hollis H. Buckelew, Little Rock, has been ordered to active duty with the Army Medical Corps and assigned to Army and Navy General Hospital, Hot Springs National Park.

L. J. Harrell has moved from Prescott to Bauxite.

FRANK VINSONHALER, age 78, died at his home in Little Rock, September 1st, after an illness of several months. Born at Graham Missouri, April 14, 1864, he attended Northwestern Normal, Oregon, Missouri, and graduated in medicine from Columbia University College of Physicians and Surgeons in 1885. Following six years of practice in South Dakota, he studied at Vienna, Heidelberg, and in England, he came to Little Rock in 1893 as professor of ophthalmology at the University of Arkansas School of Medicine. In 1927, he became dean of the medical school and retired from private practice. Except for two years while he was on duty in the World War, his service with the medical school was continuous until his retirement in December, 1938. Under his guidance the medical school grew from a small building without clinical facilities to the present well-equipped and staffed institution. In civic work he was most active, having assisted in the organization of the Little Rock Community Chest, serving as its president in 1925 and 1926; acting as Belgian consul for Arkansas for many years; and has participated in many other activities in the city. He was a member of numerous Masonic orders and had served as sovereign grand inspector general of the Supreme Council of the Scottish Rite Southern Jurisdiction in the state of Arkansas for several years and had been a 33rd degree Mason for many years. During the Spanish-American War, he was a member of the Governor's Staff and during World War I he commanded Base Hospital 109, Vichy, France, for nearly two years, retiring from service with the rank of colonel. In organized medicine, he had long been a tireless worker, having served as president of the Pulaski County Medical Society and as president of the Arkansas Medical Society, in addition to holding many other offices. He campaigned vigorously for enactment of the basic science law and most recently, had served as chairman of the Committee on the History of the Arkansas Medical Society, completing his duties in the compilation of this record but a short time prior to his death. He was a diplomate of the American Board of Ophthalmology and a fellow of the American Academy of Ophthalmology and Otolaryngology and of the American College of Surgeons. He was an honorary member of the Phi Beta Kappa, had served as first commander of M. M. Eberts Post, American Legion, was a member of the Rhodes Scholarship Selection Committee for Arkansas,

was a member of the Sons of the American Revolution, and had been awarded the distinguished alumnus medal of Columbia University. On February 9, 1898, he was married to Miss Wrennetta Beidelman, who died June 21, 1936. Surviving relatives are two daughters and a son.

JOHN W. RINGGOLD, age 72, died at his home in Ashdown, September 8th. Born at Cabot, he graduated from the University of Arkansas School of Medicine in 1890, and had practiced in Little River county since 1894. In addition to his membership in the Methodist Church and the Rotary club, he had been county health officer for twenty years and had been secretary of the Little River County Medical Society for many years. Surviving relatives are his wife, two sons and two daughters.

COMMUNIQUE

September 9, 1942

San Francisco, California

To the Editor:

When one gets duty in California, it is most imperative that he be furnished moral support from a good state.

Dr. Calcote and I are stationed in the same office. We send best regards to all the doctors.

Please send our Journal to:

Office of Naval Officer Procurement
703 Market Street

San Francisco, California

R. J. Calcote, Lt. Cmdr.

and

J. M. Hundley, Lt. (j.g.)

COMMUNIQUE

To the Editor:

This note will answer your inquiry concerning my status received while I was in the throes of "Going on duty." I was ordered to active duty at the Army and Navy General Hospital, Hot Springs, August 28th, and up to this point, it is a nice vacation. However, there are signs of increased activity.

With my bulging waistline and plowboy gait, I look about as military as a Holy Roller preacher in the Chaplain's corps. Encouraging, however, are the remarks of certain friends who have added that "this is the first time I've seen Doc with this shirt tail in all the way around."

I will keep you informed.

Hollis H. Buckalew, Capt., M. C.

RANDOM THOUGHTS OF THE SECRETARY

August 23rd. Conversing with Foltz who is visiting San Francisco on official business with the Navy, proud of designation as Surgeon for his unit, which perhaps carries more weight in these times than letters after one's name.

August 24th. For the past three days preoccupied with the care of the youngster's collie who has a fracture of the femoral neck from a hit and run driver, finding it difficult to agree with the veterinarian who is an advocate of leave 'em where they lie, a teaching hard to reconcile after all these years of association with orthopods who have all manner of fancy appliances for this one type of fracture.

August 30th. On this day we take off, fly and land an aeroplane all alone!

September 5th. The confusion that was Bill Arnold's as he left Chamberlain's residence this night is vividly related by Chamberlain. How much trifles affect our lives and conduct!

September 6th. Journeying to Little Rock by rail affording Clyde McNeil the opportunity to converse in free and easy manner, a difficult feat on our last trip which was by air. In the Little Rock station greeting Clyde Rodgers, enroute Houston, for whom procurement and assignment is now but a sad remembrance, but of which he is completely free by disbandment of the board. Perhaps we may wish for disbandment of the office of state chairman!

September 9th. We know that not all of the things in the books have come our way during an eventful career in medicine, but today brought the first individual who gives the history of having been bitten by a skunk.

September 14th. North on the Southern Belle, we converse with that much-maligned person, a military policeman and learn first-hand of his problems and how he has now been prepared by special training to cope with them. Which, as we recall it, is quite a change from the days of 1917-1918. In the Kansas City Union Station we see, for the first time, campaign ribbons with stars indicating battle participation by the wearers in World War II.

September 15th. Arriving Chicago quite late, we engage in the sessions with X-ray colleagues, finding Fred Hames the other Arkansan present. On this trip acting as father, mother and nurse to a nine-year old, it is not strange that tonight we pass through the canvas gate of the "greatest show on earth," carrying on in traditional style despite the handicaps of the emergency. Yet, our nostalgia is abruptly checked by the realization that there is no band! What must Merle Evans, the greatest circus trumpeter of all, think of a juke box taking the place of a band in a circus?

September 16th. Making diligent effort to absorb scientific knowledge throughout the day, calling it all off at nine o'clock, giving the better half way up in Maine a telephonic good night, wondering if she could handle the situation with the youngster with more ease and finesse.

September 17th. Taking departure of Chicago this night, rain softly falling, and we are glad to let them have it, quite comfortable as the guest of the Pullman Company.

September 18th. Caught in the delays of war railroad-ing, we miss our connection out of Kansas City, and the American Legion, even in diminished numbers having possession of all hotel rooms, it becomes our lot to rest tired feet in two picture shows for the afternoon, thus filling our quota of movies for a goodly part of the duration, we hope.

STANDING COMMITTEES

(Appointments expire with the annual session of the year indicated.)

- SCIENTIFIC WORK—H. King Wade, Chairman, Hot Springs National Park (1944); W. R. Brooksher, Fort Smith (ex-officio); * Euclid M. Smith, Hot Springs National Park (1943); * Joe H. Sanderlin, Little Rock (1945).
- MEDICAL LEGISLATION—Jos. F. Shuffield, Chairman, Little Rock (1943); C. W. Dixon, Gould (1943); S. J. Wolferman, Fort Smith (1944); M. L. Norwood, Lockesburg (1944); W. G. Hodges, Malvern (1945).
- HEALTH AND PUBLIC INSTRUCTION—W. B. Grayson, Chairman, Little Rock (1943); Byron L. Robinson, Little Rock (1945); J. Harry Hayes, Little Rock (1945); M. C. Crandall, Wilmot (1943); R. M. Eubanks, Little Rock (1944); Hoyt R. Allen, Little Rock (1944).
- MEDICAL EDUCATION AND HOSPITALS—M. J. Kilbury, Chairman, Little Rock (1944); * J. W. Amis, Fort Smith; O. W. Clark, Pine Bluff (1944); Earle H. Hunt, Clarksville (1945).
- PUBLIC RELATIONS—W. T. Wootton, Chairman, Hot Springs National Park (1945); H. A. Rands, Dumas (1943); J. M. Kolb, Clarksville (1944).
- MEDICAL ECONOMICS—H. E. Mobley, Chairman, Morrilton (1945); * J. H. Wilson, Wynne (1944); R. M. Blakely, Little Rock (1945).
- SCIENTIFIC EXHIBIT—Sam Phillips, Chairman, Little Rock (1943); M. J. Kilbury, Little Rock (1945); * A. G. Sullivan, Hot Springs National Park (1944); W. C. Langston, Little Rock (1944); W. Decker Smith, Texarkana (1944).
- NECROLOGY—W. A. Snodgrass, Chairman, Little Rock (1944); C. A. Archer, DeQueen (1945); E. F. Ellis, Fayetteville (1944); W. H. Mock, Prairie Grove (1944).
- CANCER CONTROL—Fred Hames, Chairman, Pine Bluff (1945); * Fred H. Krock, Fort Smith (1943); Vincent O. Lesh, Fayetteville (1943); Glenn Johnson, Little Rock (1944); D. E. White, El Dorado (1945).

SPECIAL COMMITTEES

- MATERNAL AND CHILD WELFARE—S. A. Thompon, Chairman, Camden; Don Smith, Hope; R. D. Dickens, Monticello; * B. P. Briggs, Little Rock; * C. G. Leverett, Eudora; Robert Hood, Russellville; J. K. Walker, Pine Bluff; * Clyde D. Rodgers, Little Rock; E. C. McMullen, Pine Bluff; G. L. Kimball, DeQueen; R. C. Kennerly, Camden; C. R. Henry, Little Rock.
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- AUXILIARY—* T. Duel Brown, Chairman, Little Rock; J. A. Moore, El Dorado; E. C. Moulton, Fort Smith; M. L. Dalton, Brinkley; C. A. Rosenbaum, Little Rock; * R. L. Taylor, Conway.
- STUDY OF MIDWIFERY—J. B. Jameson, Chairman, Camden; Roy I. Millard, Russellville; B. J. Reaves, Little Rock; E. A. Callahan, Carlisle; Martin C. Hawkins, Jr., Searcy.
- LIASION WITH ARKANSAS TUBERCULOSIS ASSOCIATION—A. C. Shipp, Chairman, Little Rock; S. C. Fulmer, Little Rock; J. D. Riley, State Sanatorium; * W. P. Ward, Fordyce; W. H. Bruce, Pine Bluff.
- INDUSTRIAL HEALTH—E. E. Barlow, Chairman, Dermott; S. J. Allbright, Searcy; Fred W. Harris, Little Rock; * J. Donald Hayes, Little Rock; M. E. Foster, Fort Smith; S. A. Drennen, Stuttgart.
- MENTAL HYGIENE—N. T. Hollis, Chairman, Little Rock; Geo. B. Fletcher, Hot Springs National Park; A. C. Kolb, Little Rock; Elizabeth Fletcher, Little Rock; Pat Murphey, Little Rock.

* In Military Service.

WOMEN'S AUXILIARY NEWS

REPORT OF THE TWENTIETH ANNUAL CONVENTION OF THE WOMEN'S AUXILIARY TO THE AMERICAN MEDICAL ASSOCIATION, WHICH WAS HELD IN ATLANTIC CITY, N. J., FROM JUNE 8 TO 12, 1942

I arrived in Atlantic City, Monday, June 8th, to attend the Convention of the Women's Auxiliary to the A.M.A. So far as I know, I was the only Auxiliary member from the State of Arkansas.

The Pre-Convention Board Meeting was held on Monday, June 8th, in the lounge floor of Hotel Haddon Hall. Mrs. R. E. Mosiman, National President, presided. At 12:30, Mrs. Mosiman gave a luncheon in the Bakewell Room honoring Mrs. Frank Haggard, President-elect, and all past Presidents and the members of the Advisory Council.

At four o'clock Monday afternoon, a tea in honor of Mrs. Mosiman and Mrs. Haggard was given by the Women's Auxiliary to the Medical Society of New Jersey. The receiving line was composed of Mrs. Mosiman, Mrs. Haggard, Mrs. Oswald R. Carlander, Mrs. Morton Major, and Mrs. David B. Allman. Tea was served from a beautifully arranged tea table in the spacious Garden Room of Hotel Haddon.

Mrs. R. E. Mosiman, President, officially opened the Twentieth Annual Session of the Women's Auxiliary to the A.M.A. on Tuesday morning at nine-thirty in the Vernon Room of Haddon Hall. Rev. Warren W. Day, D. D., of St. James Episcopal Church, Atlantic City, delivered the invocation. Mrs. J. Howard Hornberger, President of the Women's Auxiliary to the Medical Society of New Jersey gave the address of welcome, and Mrs. W. J. Butler gave the response. "In Memoriam," a very impressive service was delivered by Mrs. Joseph E. Weir.

Dr. William J. Carrington, the General Chairman of Local Committee on Arrangements of the A.M.A., extended greetings to the Auxiliary from the A.M.A.

The minutes of the Nineteenth Annual Meeting were read by Mrs. Flowers, Secretary, the roll called, and chairmen of the Convention Committees reported.

Mrs. Mosiman then delivered her "President's Message" which was to me a masterpiece of composition and delivery.

The meeting adjourned at one o'clock for a beautiful luncheon in the Rutland Room in honor of the past Presidents. Gardenia boutonnieres were presented to all of the guests. Mrs. R. E. Mosiman presided. Guest speakers were Dr. W. W. Bauer, Mrs. Augustus S. Kech, Dr. Rollo K. Packard. Music was furnished by a string trio with songs by Mr. Leo Fontaine of New York.

The general open meeting of the Ninety-third Convention of the A.M.A. was held in the ball room of the world's largest Convention Hall. Over three thousand doctors, wives, and guests attended. All of the exhibits were also in the Convention Hall.

The general session of the Women's Auxiliary convened in the Vernon Room of Haddon Hall on Wednesday, June 10th, at nine-thirty a. m., and adjourned at one-thirty for the annual luncheon. This luncheon too was very beautiful. The National Board members were seated immediately in front of the speaker's table. Mrs. Mosiman presided, and the guest speakers were Dr. Fred Rankin, President of the A.M.A., and Dr. Morris Fishbein.

Following the luncheon, Mrs. Frank Haggard was installed as the new National President. Her address was brilliant and straight forward, and most fitting to the crisis in which we now exist. Mrs. Mosiman was presented with the President's pin.

The post Convention Board meeting was called on Thursday, June 11th; at this time the new Board members were introduced and plans for the year's work were discussed.

Thursday afternoon at the door of the hotel on the Board Walk the Auxiliary members were met by carts to carry them to Heinz Pier where Miss Lois Miller presented an organ recital. Other entertainment consisted of cooking lessons and motion pictures. Appetizers were served and souvenirs were presented to the guests.

I am told that the outstanding social event of the Convention was the dinner on Thursday evening in the Rutland Room of Haddon Hall, and the President's reception and ball at Hotel Traymore—"a most elaborate affair." Because of the fact that I was in Atlantic City without an escort, I, of course, could not attend the dinner or the ball.

Respectfully submitted,

MRS. L. G. FINCHER,

President of the Women's Medical Auxiliary to the Arkansas Medical Society.

COMMUNIQUE

Bushnell General Hospital,
Brigham City, Utah,
Sept. 24, 1942.

To the Editor:

Please put my mailing address down as Bushnell General Hospital, Brigham City, Utah. I had two very enjoyable months at Wm. Beaumont General Hospital, El Paso. I was assigned to a medical ward and nearly all my work was in my specialty of gastro-enterology. I am assigned to Bushnell as chief of gastro-intestinal section and we expect to be busy soon. Maj. Henry Holtenberg is chief of the surgical service. We are hoping for a few more Little Rock men to come here.

Had a swell trip through the Painted Desert, Petrified Forest, Grand, Zion and Bryce canyons on the way here from El Paso. While in El Paso I was able to go to Carlsbad Caverns. Among the 1,100 people going through in the crowd that day were four of my medical students from home and a former patient. So, I had a good time.

Regards to all the gang.

Sincerely,

Jerry Levy.

HOSPITALS TO BE REIMBURSED FOR CARE OF CIVILIAN CASUALTIES

Payment for temporary hospitalization of civilians injured as the result of enemy action has been made possible by a recent agreement between Administrator Paul V. McNutt of the Federal Security Agency and Director James M. Landis of the Office of Civilian Defense. The funds have been allocated to the U. S. Public Health Service by the Federal Security Administrator from funds made available to him from the President's emergency fund. A joint memorandum embodying the details of the program has been issued by Surgeon General Thomas Parran of the U. S. Public Health Service and Dr. George Baehr, Chief Medical Officer of the Office of Civilian Defense.

The plan provides that all hospitals caring for civilian casualties in the event of air raids or other enemy action will be reimbursed by the federal government at a rate of \$3.75 a day. This is the rate of reimbursement established by the Federal Board of Hospitalization for federal beneficiaries in government hospitals and may be changed as conditions require, it was stated.

Any hospital in the nation, voluntary or governmental, may be used as a casualty receiving hospital in the Emergency Medical Service established by the Medical Division of the Office of Civilian Defense. In addition, certain hospitals and other institutions in "safe areas" may be used as emergency base hospitals for casualties or other patients whom it may be necessary to evacuate from urban hospitals in exposed areas. The new agreement provides that federally owned equipment may be loaned to the base hospitals and that their staffs will be supplemented by physicians of the region who will be commissioned in the reserve corps of the U. S. Public Health Service. It was emphasized that management and control of all hospitals, both local casualty receiving hospitals and emergency base hospitals, will remain the responsibility of the local or state authorities.

In the establishment of emergency base hospitals, emphasis will be placed on the relative safety of the area and the availability of existing hospitals and other institutions. Hospitals are now being surveyed for this purpose and will be classified on a basis of size, equipment and standards of operation.

It is proposed to begin immediately the organization of medical staffs for future base hospitals as hospital units affiliated with casualty hospitals similar to the affiliated general hospitals of the Army. The physicians, surgeons, specialists and dentists who are to be commissioned in the Public Health Service Reserve for service in these hospitals will receive rank, pay and allowance equivalent to those of the Medical Corps of the U. S. Army. They will be selected from older age groups, from physicians with disabilities that make them ineligible for military service, and from women physicians. As far as possible, they will be assigned to service in the regions in which they live. Because they are to function as balanced professional staffs, they will be recruited from the staffs of civilian hospitals and cleared through the Procurement and Assignment Service.

Regional Medical Officers of OCD who are appointed in the Public Health Service will be the regional representatives of both agencies for this program. State Chiefs of Emergency Medical Service or their deputies may also be appointed consultants or commissioned in the Public Health Service in order that they may act as state representatives for the two agencies in the organization of emergency hospital facilities and the reimbursement of hospitals for the care of civilian casualties. In the more populous coastal states a full-time State Hospital Officer may be needed, who will also be eligible for appointment in the Public Health Service.

Appointment of a state hospital officer as an official of Emergency Medical Service has been recommended by the Medical Division for densely populated states in the target areas. These areas are principally in the First, Second, Third, Fourth, Eighth and Ninth Defense Regions.

The principal function of the hospital officer will be the planning of emergency base hospitals for the reception of civilian casualties and other hospital evacuees. An official memorandum sets forth his duties as follows:

1. To survey the hospitals throughout the state (excluding those in the exposed cities) to determine how many beds can be put into immediate use in emergency with existing kitchen, laundry, sanitation and other engineering facilities:
 - (a) By clearing patients to their homes.
 - (b) By restricting admissions.

- (c) By use of rooms not normally used for patients.
 - (d) By rehousing medical and nursing staff and other hospital personnel outside the hospital.
 - (e) By use of neighboring buildings (schools, hotels, etc.), for patients (or staff).
 - (f) By extra bed accommodation in temporary structures erected on available grounds adjacent to the hospital.
2. To assist in designating for each casualty hospital or group of hospitals in each exposed city:
 - (a) The line of evacuation to the base.
 - (b) The transport arrangement.
 - (c) The emergency base hospitals provisionally allotted to each casualty unit.
 3. To keep constantly informed of the bed state of every hospital in his area by weekly returns.
 4. To advise the Office of Civilian Defense, through the Regional Medical Officer, on the need for providing additional accommodations, e. g., by temporary construction or by converting convalescent homes, hotels, school dormitories or other structures into hospitals.
 5. To report to the Regional Medical Officer of the Office of Civilian Defense any exceptional conditions requiring action (e. g., beyond state boundaries, or required by the need of the military situation) and to forward to him copies of a monthly summary report on the state's emergency hospital program. Where a hospital outside a state boundary is readily accessible for the reception of casualties from an exposed city, this fact should also be noted.
 6. To maintain constant touch with the other service departments of the State Defense Council (e. g., evacuation, etc.).
 7. To supervise the distribution of medical and hospital supplies under the direction of the State Civilian Defense Property Officer and report any threatened deficiency to the Regional Medical Officer.
 8. To supervise staff arrangements for emergency base hospitals and for reception areas.
 9. To control movements of medical and nursing staff, as well as of casualties in any situation affecting emergency base hospitals.

The hospital officer must work in close collaboration with the state evacuation authority, the memorandum points out. In addition, he may find it necessary to collaborate with the state officer in charge of institutions for the care of mental patients, if such hospitals are to be used as emergency base hospitals for the reception of casualties and other patients evacuated from urban hospitals. Transport arrangements are to be handled in collaboration with the evacuation authorities of the state and the military authorities of the area.

COMMUNIQUE

Los Angeles, California,
August 10, 1942.

To the Editor:

I am very sorry that I did not get a chance to write you as I said I would. The truth was that I had to get down in Arkansas County for a picnic at Saint Charles on the White River where they gave me a fish fry of that fine White River cat with all the other fixings that go with it, and you know what that means. Something over five hundred and fifty people were there, and did we have a good time!

The medicos of Pulaski County gave me a cocktail party in the cool room of the Marion Hotel and we had another good time. It was fine to again meet so many of my old friends. Many of them are gone, but for a fine cause, and I know they will do their part no matter where they are.

The Chamber of Commerce gave me a great time in Little Rock and every one was so very kind to me. The Lions Club also gave me a party at which time I was able to meet many of my friends.

Where is my old friend, Dr. Bert Ware? He might have sent The Hero a card, Ha! Ha! Speaking of Hero, I for one do not feel that I did any more than I should have done, or any more than any other doctor would have done. My number was not up and I got through. Left Seorabi, Java, on February, Friday the 13th, and in San Francisco, June 13th—that was a Saturday. We had a black cat aboard the M. S.



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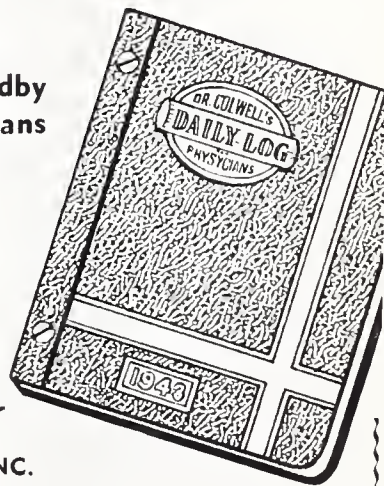
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Jannsen and all those Fridays the 13th, how about it?

I am here to help in some little way with a motion picture which is being directed by Cecil B. DeMille of Paramount. It is for Navy relief. They have already given \$50,000 and will also give a percentage of the gate intake, which I am told will amount to \$200,000, so after all, I seem to be doing a little toward the war end. I feel I am doing something for the Navy people who need some help—perhaps better here than somewhere else. I do hope to get back in it somewhere some day.

I understand that some of our Arkansas doctors are in West Australia or other parts of Australia. Well, I can say one thing, the Australians will take good care of them, especially will the ladies. So do not worry about them. Wish I was there now.

Best regards to all,

Always

Wassell.

Lt. Comdr. C. Mca. Wassell,
(MC) U.S.N.R.

COMMUNIQUE

CANTONMENT HOSPITAL

Fort Sill, Oklahoma

August 19, 1942.

To the Editor:

Entered upon active duty with the Army, July 10, and am presently stationed here at Fort Sill. I wish to thank you for your cooperation in clearing me for availability for Army service, as well as for other past favors.

And now may I ask that my copy of The Journal of the Arkansas Medical Society be sent to me here. My old address was CCC Headquarters, Little Rock.

Sincerely,

James M. Nisbett,
Capt., M. C.

BOOK REVIEWS

The Toxemias of Pregnancy: By William J. Dieckmann, M. D., Associate Professor of Obstetrics and Gynecology, The University of Chicago, etc. Pp. 521 with 50 illustrations and three color plates. Price \$7.50. Saint Louis: C. V. Mosby Company, 1941.

This thorough and complete presentation of the subject with all the known facts and the more probable theories

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of etiology, diagnosis and treatment discussed. The volume is primarily of value to the teacher.

Clinics. A bi-monthly publication, edited by George Morris Piersol, M. D., Professor of Medicine, Graduate School of Medicine, University of Pennsylvania. Successor to the New International Clinics. Philadelphia: J. B. Lippincott Company. Yearly subscriptions \$12 (paper), \$16 (cloth).

This is a new publication which will feature a symposium in each issue and contain, in addition, papers by leading men of medicine over the country. It is expected to stress timeliness, current reporting and practical and useful articles. The first number promises well for its future.

National Formulary. Seventh edition. American pharmaceutical Association. Price \$6.00. Easton, Pennsylvania: The Mack Printing Company, 1942.

The seventh edition of the work is the first in the plan of the American Pharmaceutical Association to continuously revise this compendium. An addition to this volume is a section on preparations for use in the clinical laboratory which should be of value to the pharmacist. Seventy-one articles, not official in U. S. P. XII have been added.

A Textbook of Gynecology: By Arthur Hale Curtis, M. D., Professor and Chairman of the Department of Obstetrics and Gynecology, Northwestern University Medical School; Chief of the Gynecological Service, Passavant Memorial Hospital, Chicago. Fourth Edition, Reset. 723 pages with 401 illustrations. Philadelphia and London: W. B. Saunders Company, 1942. Price \$8.00.

Dr. Curtis' Textbook of Gynecology has been enlarged and improved. The chapter on Pelvic and Perineal Anatomy of the Female is taken up from a newer and more detailed standpoint. The illustrations for this part are exceptionally instructive. The chapters on gonorrhea and treatment with the sulfonamides have been completely re-written and comprehensively given.

Tumors of the ovary are classified and fully described. Palliative and radical treatment of uterine displacements and lacerations from child-birth are more fully discussed than before and operative steps are carefully illustrated. The author discusses the treatment of the early months of pregnancy which very often falls within the hands of the gynecologist. Not much attention is paid to a discussion of endocrinology, but this edition is on the whole more comprehensive than previous ones and also more practical.

Blood Grouping Technic. By Fritz Schiff, M. D., Late Chief of the Department of Bacteriology, Beth Israel Hospital, and William C. Boyd, Associate Professor of Biochemistry, Boston University. Pp. 248. Price \$5.00. New York: Interscience Publishers, 1942.

In this volume the authors discuss the principles of blood grouping and the technical methods of classification. It is a comprehensive work on the subject and of value to the technically-minded physician as well as to the clinician.



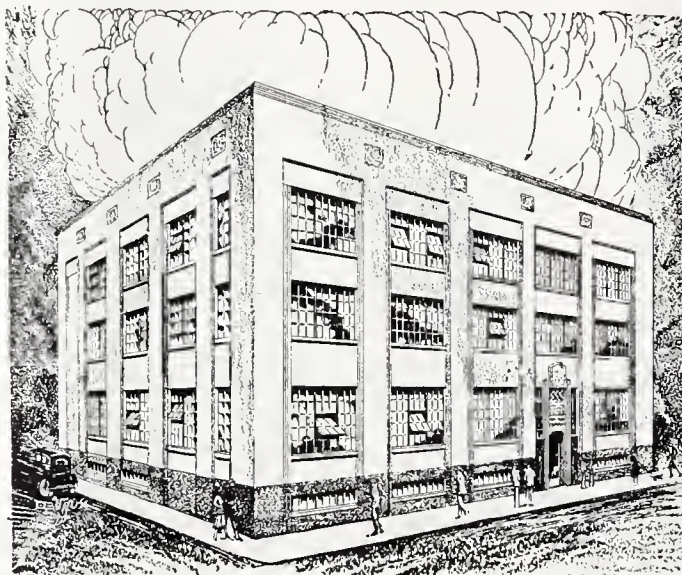
PHYSICIANS of the South have an urgent call to Richmond for the annual meeting of the Southern Medical Association, Tuesday, Wednesday and Thursday, November 10-11-12—a great wartime meeting. In the general clinical sessions, the twenty sections, the four independent medical societies meeting conjointly and the scientific and technical exhibits, every phase of medicine and surgery will be covered—the last word in modern, practical, scientific medicine and surgery. Addresses and papers will be given by distinguished physicians not only from the South but from other parts of the United States.

REGARDLESS of what any physician may be interested in, regardless of how general or how limited his interest, there will be at Richmond a program to challenge that interest and make it worth-while for him to attend.

ALL MEMBERS of State and County medical societies in the South are cordially invited to attend. And all members of state and county medical societies in the South should be and can be members of the Southern Medical Association. The annual dues of \$4.00 include the Southern Medical Journal, a journal valuable to physicians of the South, one that each should have on his reading table.

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No. 6

THE IMPORTANCE OF SPAS IN THE MILITARY AND DEFENSE PROGRAM*

WALTER S. McCLELLAN, M. D.†

The title of this paper was selected before Pearl Harbor. Today it should read either, "The Importance of Spas in the Victory Program," or, "The Place of Spas in the Care of Military Personnel and Civilians During the War." One cannot speak of this subject without paying tribute to the extensive work which has gone forward here in Hot Springs National Park during the past hundred years and more. The largest spa in this country has developed around the thermal waters of your community. I can assure you it is both a pleasure and an honor for me to be asked to discuss this subject before your Society.

There is no lack of patients in this country who can receive benefit from spa therapy. I have recently considered the wide occurrence of chronic disease (1), a field in which spa therapy has a large indication. It is roughly estimated that approximately 15,000,000 persons in the United States suffer from some degree of disability caused either by cardiovascular disorders or rheumatic ailments. King (2), in discussing the rheumatic diseases before your Society last year, pointed out the great importance of this group of disorders as a cause of disability. Aside from these two major groups, there are the conditions resulting in metabolic disfunction such as obesity and gout, disorders that result in abnormal function of the gastrointestinal tract, liver and gall bladder, and various skin ailments, all of which can be, to some extent, benefited by a program of treatment built around the use of mineral waters.

The increasing incidence of these chronic conditions in a population which is increasing in its average age offers a challenge to the physicians of this country. It is in this group that the spa

has much to offer in aiding these patients to live more comfortable and productive lives. The problem of the care of chronic disease is ever present both now when we are at war, and also, when peace comes again.

What Justification Have the Spas for Raising Their Voices in This Time of Stress?

One needs only to consider the actual amount of work which is being done by the spas in this country and to consider for a moment their facilities for the care of patients who seek the benefit which may be obtained from a stay there.

During the past year, I (3) have assembled some information regarding this matter and it is interesting to find that the spas of this country can accommodate approximately 60,000 people at one time. There is a wide variation in the type of these accommodations, ranging from the large number of patients which can be cared for here in Hot Springs, to the many smaller places where no more than 10-50 people can be housed. A summary of this material is included in the following tables:

Table 1.

In the first table the data has been assembled by states showing the number of localities which have some natural therapeutic agent and the total number of accommodations available in the community. It will be noted that some data has been obtained on 103 localities covering 33 states. There are 15 states without any developed spa facilities at the present time. In some of these states there are mineral waters but no provision has been made for their therapeutic use.

There is a great variation in the number of people who may be accommodated at the different places. An analysis of this information has been made in Table 2. A total of 83 localities

Table 2.

have facilities for less than 500 patients each. It was noted that there are eleven places where 1,000 or more patients may be cared for at one time.

† Medical Director, The Saratoga Spa; Associate Professor of Medicine, Albany Medical School. From the Medical Department of the Saratoga Spa, Saratoga Springs, N. Y.

* Read before the 67th Annual Session of the Arkansas Medical Society, Hot Springs National Park, April 27, 1942.

Table 3.

In Table 3 is indicated the states where the largest number of patients can be cared for within their borders. It is interesting to note that Arkansas leads the rest with the largest number of accommodations here at Hot Springs National Park. California has a larger number of individual localities but there has been no extensive development about any one of their springs. It will be seen that 85 per cent of the available facilities are in these eleven states.

From the standpoint of preparedness or the use of the spa facilities in our war program, it is interesting to note their availability in each Corps Area as is shown in Table 4. With the

Table 4.

exception of the First and Fourth Corps Areas, there are individual localities where 1,000 or more patients may be accommodated at one time.

The importance of this material for our victory program will be considered in further detail later in the paper.

It is true that all of these facilities are not immediately available for the care of the seriously sick patient such as the acute military casualties from the field of battle. Nearly all of these facilities, however, can be made available for the care of the ambulatory patient. Allowing for a stay of six to eight weeks for each patient, and this is more than double the time usually spent by a patient at a spa, we can estimate that approximately 500,000 patients could be accommodated each year.

Looking at this problem from another standpoint, the spas are justified in speaking at this time because of the results which have followed the use of their programs of treatment. The spas have been soundly criticized because they said that the individual mineral water had therapeutic value. Recent investigations in the Research Laboratory at the Saratoga Spa have shown that the waters of Saratoga contain all of the elements commonly found in the human body with the exception of sulphur and phosphorus. Even these elements are present in the water to a very slight degree but not in a significant amount to affect the body when the waters are taken. You have only today to read a summary of the papers presented before the Federated Societies of Biology and Medicine at their recent meeting in Boston to appreciate the role of minerals in the body. The use of the tagged element, that is, the artificially radioactive mineral, is opening up a new range of vision into the vital

processes of human physiology and biochemistry. Also, it now can be emphasized that the important catalytic action supplied by the enzymes in so many vital processes without doubt depends on some mineral which must act in conjunction with the larger organic portion of the molecule to accomplish its work.

In the clinical study of patients at spas it is difficult to obtain a control series of patients, an important basis for drawing conclusions in the study of any therapeutic program. This, of course, has been widely used in the studies of pneumonia. It has not, however, been possible in the spas to study the results of treatment in a series of patients with chronic disease such as heart ailments or rheumatic disorders with and without the use of the particular natural agent of the community. It is our experience at the Saratoga Spa that the patients come there particularly for the program of treatment and if, for the sake of academic information, we suggest that they stay and refrain from taking the mineral waters, they will immediately go home. At Saratoga we are at the present time conducting a survey of patients who come to the spa with cardiovascular disease. Through a system of follow-up letters with the home physician, it is hoped that over a period of years valuable information regarding the part spa treatment plays in this particular condition will be obtained. It will be necessary in that survey to compare the results with a group of patients comparable both medically and economically who have not received spa treatment. It is difficult to find such reported series of patients in chronic disease. We recognize the complexity of this problem but it is a challenge to all who are working with these natural agents.

Clinical observation and study of the patients are well known to those of you who practice at Hot Springs National Park. We have been slow in assembling and critically analyzing the case histories of our patients in order to bring to a meeting such as this and to our colleagues in other parts of the state and nation information regarding the results of spa treatment. From the standpoint of logic, it would appear that patients would not have been going to spas for thousands of years just for the sake of a vacation. They must obtain some definite benefit from their stay or this type of treatment would long ago have been completely discarded. The physician at the spa also has an opportunity in a limited number of patients who return on subsequent years for continued treatment to observe the results of treatment over a longer

period, and his detailed review of this group is important.

Therefore, on the basis of the facilities available in our spas and the experience obtained from research and clinical observation regarding the value of mineral waters and spa therapy, I believe that the spas of this country are justified in considering that they have something of value to offer our National Victory program.

What Conditions Are Suitable for a Program of Spa Treatment?

In the field of chronic disease, which already has been mentioned, we find that the patients going to spas usually fall into one of four or five categories. In 1936, we assembled information on over 6,000 patients who had been treated at the Saratoga Spa either by private physicians or in the charity clinic of the spa itself. These patients were classified on the basis of the primary complaint for which they came. A table containing the results shows that in our work at

Table 5.

Saratoga approximately one-third of our patients have some cardiovascular disability and approximately one-quarter suffer from rheumatic disease. Conditions affecting the gastrointestinal tract and metabolic processes were not as prominent in this survey. If one made a similar survey at Hot Springs National Park, I would predict that you would find a higher percentage of rheumatic patients and that those conditions primarily affecting the cardiovascular system would not be so prominent. This survey was made in order that we could study the challenge which the presence of these patients made to the spa and to see whether or not they received benefit from the program. Time does not permit a complete consideration of the program used for each type of chronic disease.

In the second place, spa treatment can play a large part in the convalescent period following acute illness or injury. We know that the person who has an acute upper respiratory infection will be well and back at work usually within a few days to a week. The patient even with the usual case of pneumonia generally responds to a rest of two or three weeks. There are, however, many patients with post infectious debility who drag on for weeks and months before they recover their normal health again. Also, following a severe surgical operation many times it takes weeks to get back to full activity. In these conditions, the program available at many spas can be utilized to advantage. One can speak of it as a conditioning program—a program where

through the use of the natural agents and regulated periods of rest, exercise, recreation and controlled diet it is possible for the patient more speedily to return to normal health and activity.

One hesitates to speak of another group of conditions in which the spa program may play some part. I refer to an indefinite group of patients in which there is functional inadequacy. This inadequacy may be constitutional in nature. The patient may not have been blessed with sound healthy tissues or organs, or it may be that the inadequacy comes in the nervous control and regulation of mental and physical activity. Spa therapy is not a panacea for all the ailments of the human body. It is possible, however, that some patients in this group who have the opportunity of following the well-rounded program of treatment at the spa will benefit.

A program which can be and I believe should be carried out more frequently is the use of spa facilities for healthy people. It is interesting that in our survey mentioned above, ten per cent of the patients came with no apparent disability. The spa regime can fit into the health controlled vacation which Singer (4) has so well described. It also offers an opportunity for a periodic health check. It is not possible to say that the person who takes these health precautions will escape the degenerative diseases. Long term studies covering the lifetime of many individuals would be necessary to give information on this point.

Where in Defense or in War Do These Programs Fit?

In 1918, Norman (5) wrote as follows:

"This country faces a medical problem, in complexity, magnitude and seriousness, never before encountered in its history. That problem is the efficient disposition of its soldiers who have become incapacitated because of surgical, medical, neurological and mental diseases engendered by and incident to the extraordinary stress and strife of this war."

If Norman at that time considered the problem complex in its magnitude and seriousness, you can appreciate that today we face an infinitely greater problem in our war activities which now encircle the entire globe. Norman pointed out the importance of the spas for the care of certain types of military casualties. He stressed particularly the indications which I have discussed briefly in the preceding section. It is clear then that facilities such as are available at spas can be utilized by those responsible for the care of our military personnel, in the rehabilitation of the injured, better convalescent

care following acute disabling illnesses, and the care of chronic conditions which may not have resulted from the war but which have been accentuated by the stress and strain of the war. Finally, these facilities can be used for soldiers who require a period of conditioning. The development of army camps in areas suited climatically to stimulating body metabolism can contribute to the better trained military personnel.

In this war which reaches into all zones from the poles to the equator, one must plan from the medical standpoint on a greater variety of disabilities than was necessary in World War I. In spite of protective vaccination and specific therapeutic drugs for the treatment of malaria and other tropical diseases, yet it is common to see people returning from the tropics suffering from chronic conditions of the liver, gall bladder, stomach and other organs. For generations, such patients have followed the program of treatment in European spas with benefit.

War today does not mean casualties only among the enlisted personnel, as England has experienced injuries to civilian population which may be equal or greater than the casualties in the enlisted services. This, of course, is not true in the face to face fighting of the Russian fronts, but the extensive use of aerial warfare with its consequent bombing of large cities has resulted in civilian casualties far beyond that known in any previous war. It is not necessary to repeat the indications given above but they all are applicable in the care of the civilian patient at the spa.

Aside from the place of spa treatment in the care of the military and civilian personnel, one should mention particularly the effort which is being made to relieve our general hospitals of the chronic patient who occupies beds which in the face of increasing or emergency demands should be available for the acutely ill or injured. It is my belief that plans should be made to use the facilities available in the spas for chronic patients and those who require an additional period of convalescence so that our hospitals could have available an increased number of beds for immediate use. I have already mentioned that, on the basis of present accommodations, approximately 500,000 patients yearly could be cared for at the spas. True, not all chronic patients can be taken to the spas because facilities are not available for their proper care and the facilities should be used for the patients who could benefit from the therapeutic use of the spa treatment. In certain cases the

spas are a considerable distance from the home of the patients and they object to making this trip away. Such objections as these, however, need play no part in the problem we are considering today. Our soldiers do not raise any question regarding where they may be sent or to what service they may be assigned. The civilians of this country must be ready to accept discipline in order that they may contribute toward the final victory in this war.

I have not particularly touched in this section on the direct relation of the importance of spas in the industrial program but there also we find that the intense effort required in meeting quotas and demands of the stepped-up production of military supplies and equipment, places additional stress and strain on the laborer and particularly on the executive staff. It is therefore evident that the regulated use of spa facilities could be utilized to good advantage, particularly in this group.

Why Has Spa Therapy Not Received Wider Acceptance by the Medical Profession?

This question is one which I frequently raise when I meet physicians in various groups. It appears that the principal reasons for the lack of acceptance of spa therapy by the medical profession are due to three factors. In the first place, the physicians in this country are not familiar with the mineral waters and spa therapy. They have not been taught its value in the medical schools and therefore are not ready to back something of which they know nothing. In the second place, the spas have, without question, made certain claims which the physician considered to be entirely in a field of commercialism and exploitation and so he did not take an interest in their work. In the third place, there is a conclusion as to whether the spa is a playground and area for recreation or whether it is a real health and medical agency. The physician therefore has usually considered that spas were playgrounds and recreation parks and therefore had no particular place in his therapeutic program.

From the increased information being made available through scientific research programs dealing with these natural agents and the evidence which is accumulating in carefully controlled studies of patients who do take these treatments, it is clear that we should bring data regarding the benefits of these programs to the medical profession of this country and that the administration of the spas should provide all means available in order that careful studies may

go forward to properly evaluate the therapeutic value of these important agents.

What Does a Program of Spa Mobilization Entail?

From the data which I presented earlier in this paper, Hot Springs National Park has the largest spa facilities of any single locality in the United States. With its approximately 20,000 accommodations it offers one of the best places for the development and the testing of this war emergency program which I have been discussing.

The Saratoga Spa lies in the so-called target area which has been designated as all territory within 300 miles of the seaboards. It also lies within 25 miles of the large industrial city of Schenectady where intensive war production is in progress. The Saratoga Spa in addition to its regular activities is a possible point for the evacuation of the acute hospital facilities for the whole Capitol area in New York State in case repeated bombing attacks disable the present hospitals. In an extreme emergency it would be possible to accommodate 2,500 patients in the spa buildings. This approximately equals the bed capacity of all hospitals within 30 miles of Albany. It is not my purpose, however, to concentrate on our local problems today but to consider more what part you can take in this program.

In mobilizing our spas the first step includes the assembly and arrangement of information regarding the facilities for accommodation, medical care and proper treatment of the patients sent to the locality. Much of this information has been assembled through the Committee of American Health Resorts. Further data regarding purely climate and seashore localities is needed.

Secondly, the Government must be convinced that this program of spa mobilization is sound. They will rely on their medical advisors and some of them may not even be familiar with the questions we have been discussing today.

Then, in the third place, ways and means must be provided by a proper clearing program to see that those patients who may benefit are sent to the spas and that the space will not be used as a delightful home for the patient who has some condition which is not suitable to spa treatment. They had best be cared for in some other place.

Finally, the necessary business arrangements when privately owner sanatoria or hotels are to be used in this program require careful consideration. These business arrangements take

time and much planning is necessary to put this mobilization program into action.

What Can Our State Medical Societies and Their Members Do in This Matter?

I do not know how far you have gone as a Society in considering this problem. You no doubt have your State Committee on Health and Medical Emergencies, just as all states have. One problem which has come before this committee in our own state is that of evacuation. I do not believe that this problem is as acute in the inland sections as it is on the sea coast. However, I do believe that here your committee could consider carefully the facilities available for carrying out a program such as has been under discussion, namely, the providing of facilities for selected military and civilian casualties, and possibly the evacuation of many chronic patients from the acute hospitals in this whole section of the country. I refer particularly to the chronic patients who should derive benefit from a program of treatment in the spas rather than just taking the facilities of our spas for a rest home without any consideration of the specific treatment available in the community. I believe that your state medical society can contribute in this matter.

Two years ago, the New York State Medical Society authorized the establishment of a Medical Advisory Committee for the Saratoga Spa. This committee was made up of certain officers of the state society and the presidents of each district branch and county society, and has held meetings at the Saratoga Spa in 1940 and 1941, where for two days they attended conferences on spa therapy and considered the relationship between the home physician and the work at the Spa. This has been an important step in our work which has resulted in a closer and more friendly collaboration between the Saratoga Spa and the Medical Society of the State of New York. We are just now considering the Third Annual Meeting. Due to the stress of war conditions, it will probably be omitted but the executive committee of the larger group is to hold a meeting at the spa and act as the interim advisory body. I feel very strongly that you could establish some such arrangement of co-operation which would be of great aid to the spa and also foster the improved medical control of these institutions.

Another way in which physicians become acquainted with the work of spas is through their spending some time at the spa and taking the course of treatment. Many physicians like to

visit Saratoga for horse racing and other sporting events but at all times during the active season we have physicians there seriously following the program of treatment. I suspect that such is the case at Hot Springs National Park. I feel sure that opportunity will be made available to each member of this Society to take one of the therapeutic treatments during this meeting. We may be willing to suggest baths for our patients but sometimes we prefer to use our own shower at home to any other form of bath. I am looking forward personally to experiencing the reaction to a therapeutic treatment here.

Again the state society may collaborate through its postgraduate teaching program. We have not yet in New York State been able to develop this particular feature. It is our goal, however, to have some paper on spa treatment on the program at each annual meeting of our state society. This year Dr. William Leaman, of Philadelphia, is discussing "Physical Therapy in Heart Disease," in which he is including a consideration of spa therapy and the action of carbon dioxide baths in these conditions.

Conclusions

I have discussed with you many angles of spas and the ways in which they can be utilized in our all-out war program. I cannot tell you the actual steps to take in putting these suggestions into practice. It is, of course, necessary to provide the Government with information regarding the facilities available. The information which has been assembled through the work of the Committee on American Health Resorts of the American Medical Association is available.

The next step after assembling information is to obtain action. You know, I am sure from personal experience, that it is not possible to get an answer, particularly one which involves an essentially new developmental program in a short time. A number of individuals must be consulted in these matters.

While I cannot tell you at present that the spas will be used during the war, I do sincerely believe that they are receiving consideration and that if the war continues beyond a relatively short time, there will be need for every medical facility available in this country.

I am glad to know that the spas have graciously offered their facilities for any work which they can do. I certainly welcome this opportunity of speaking here and trust that many of you will have the opportunity of visiting Saratoga sometime when you are in the East.

Table 1. Spa Facilities According to States

	Number of Localities	Total Accommodations
Alabama	3	665
Arizona	2	119
Arkansas	1	20,412
California	23	4,768
Colorado	2	830
Florida	3	430
Georgia	2	457
Idaho	2	180
Illinois	1	75
Indiana	5	1,955
Iowa	1	110
Kentucky	1	165
Maine	1	640
Michigan	3	2,755
Minnesota	2	155
Mississippi	2	310
Missouri	2	2,084
Montana	4	300
Nevada	2	74
New Mexico	5	1,161
New York	6	10,145
North Carolina	3	175
Oklahoma	2	1,030
Oregon	3	350
Pennsylvania	2	855
South Dakota	1	435
Tennessee	3	680
Texas	3	1,988
Utah	1	10
Virginia	5	1,493
West Virginia	4	1,815
Wisconsin	1	595
Wyoming	2	275
33 States	103	57,491

Table 2. Spa Facilities According to Number of Patients Who Can Be Accommodated

States	Number of Localities With Accommodations			
	Under 500	500-1000	1000-5000	Over 5000
Alabama	3	....	....	....
Arizona	2	....	....	....
Arkansas .....	....	....	....	1
California	21	1	1	....
Colorado	1	1	....	....
Florida	3	....	....	....
Georgia	2	....	....	....
Idaho	2	....	....	....
Illinois	1	....	....	....
Indiana	3	1	1	....
Iowa	1	....	....	....
Kentucky	1	....	....	....
Maine .....	....	1	....	....
Michigan	1	....	2	....
Minnesota	2	....	....	....
Mississippi	2	....	....	....
Missouri	1	....	1	....
Montana	4	....	....	....
Nevada	2	....	....	....
New Mexico	5	....	....	....
New York	3	....	2	1
North Carolina	3	....	....	....
Oklahoma	1	1	....	....
Oregon	3	....	....	....
Pennsylvania	1	1	....	....
South Dakota	1	....	....	....
Tennessee	3	....	....	....

—Continued

Table 2. Spa Facilities According to Number of Patients Who Can Be Accommodated—(Cont'd)

States	Number of Localities With Accommodations			
	Under 500	500-1000	1000-5000	Over 5000
Texas	1	1	1	...
Utah	1	...	...	...
Virginia	4	1	...	...
West Virginia	3	...	1	...
Wisconsin .....	...	1	...	...
Wyoming	2	...	...	...
Total	83	9	9	2

Table 3. States With Largest Accommodations

	Number of Localities	1,000 or Over
1. Arkansas	1	20,412
2. New York	6	10,145
3. California	23	4,768
4. Michigan	3	2,755
5. Missouri	2	2,084
6. Texas	3	1,988
7. Indiana	5	1,955
8. West Virginia	4	1,815
9. Virginia	5	1,493
10. New Mexico	5	1,161
11. Oklahoma	2	1,030
Total	59	49,606

Table 4.

Army Corps Area	Number of Localities	Accommodations
1. Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut	1	640
2. New York, New Jersey, Delaware	6	10,145
3. Pennsylvania, Virginia, Maryland, District of Columbia....	7	2,348
4. South Carolina, Tennessee, Louisiana, North Carolina, Alabama, Georgia, Mississippi, Florida	16	2,717
5. Ohio, West Virginia, Indiana, Kentucky	10	3,935
6. Michigan, Illinois, Wisconsin	5	3,425
7. North Dakota, South Dakota, Nebraska, Minnesota, Kansas, Iowa, Arkansas, Missouri, Wyoming	9	23,471
8. Colorado, Arizona, New Mexico, Oklahoma, Texas....	14	5,128
9. Washington, Montana, Oregon, Nevada, Utah, California, Idaho	35	5,682
Total	103	57,491

Table 5. Classification of 6,315 Patients Treated at The Saratoga Spa

Primary Condition	Records of the Saratoga Spa 1933-36		Records of Private Physicians		TOTAL	
	No. of Patients	Per Cent	No. of Patients	Per Cent	No. of Patients	Per Cent
1. Heart and Circulatory Disorders, including variations of Blood Pressure	522	26.5	1,425	32.7	1,947	30.8
2. Rheumatic Conditions, including arthritis, myositis, fibrositis and neuritis	714	36.4	779	17.9	1,493	23.7
3. Gastrointestinal Ailments, including liver and gall-bladder	218	11.1	896	20.6	1,114	17.6
4. Nervous Conditions, including both functional and organic disorders	200	10.2	333	7.7	533	8.4
5. Metabolic Diseases, including diabetes, obesity, and glandular disorders	83	4.2	174	4.0	257	4.1
6. Skin Diseases (Non-infectious)	18	.9	115	2.6	133	2.1
7. Miscellaneous	87	4.5	112	2.6	199	3.2
8. No Disease, including general debility	121	6.2	518	11.9	639	10.1
TOTAL	1,963	100.0	4,352	100.0	6,315	100.0

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ARTERIOSCLEROTIC HEART DISEASE *

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Definition and Pathology

Arteriosclerotic heart disease is a degenerative disease of the heart resulting from arteriosclerosis of the coronary arteries. Infiltration of fibrous tissue and calcium plaques into the walls of these arteries causes roughening, narrowing, and obliteration of their lumen. Diminished, or impaired, flow of arterial blood to the myocardium results, first, in degeneration, and, second, in fibroses of the heart muscle. At any time, sudden occlusion of a diseased coronary artery may take place due to a thrombus formation with resulting infarction of heart muscle.

Incidence

Arteriosclerotic heart disease occurs most frequently past the age of 60 but may occur as early as 30. When present early, there may be no demonstrable arteriosclerosis elsewhere. When in the aged, arteriosclerosis is usually demonstrable in the peripheral or retinal arteries. This type of heart disease is second only to hypertensive heart disease as a cause of death from heart disease.

The Heart Before Failure

An arteriosclerotic heart may be present for years with few symptoms or signs. Slight dyspnea on exertion, and frequent premature systoles may be the only findings. Systolic rather harsh murmurs may, or may not, be heard over the mitral and aortic valves due to sclerosis of these valves. The heart is not usually enlarged unless hypertension is present. When hypertension of considerable degree exists, heart disease may be due primarily to hypertension with secondary coronary arteriosclerosis from the hypertension. Where arteriosclerosis alone is present, the X-ray may show a normal sized or even a small heart. The electrocardiogram may be normal, or show only a low voltage of the QRS complex, or slight lowering of the S-T segment.

Routes of Heart Failure

Heart failure occurs 70% of the time by the anginal route, and 30% by the congestive route.

Anginal Failure

Anginal failure may occur by the syndrome of **angina pectoris**, or by **coronary thrombosis**, or

occlusion, both of which represent different degrees of the same arteriosclerotic process. In angina pectoris, the narrowing of the lumen of the arteriosclerotic coronary arteries diminishes the blood supply to the heart muscle, and their non-elasticity prevents their dilatation when extra demands are thrown on the cardiac muscle due to exertion, excitement, or a digestive load. The heart muscle lacks enough blood, and oxygen, to do the work demanded of it. The resulting anoxemia of the muscle is thought to produce spasm, or fibrillation, which produces the pain of angina pectoris. Also, there may be an associated spasm of the coronary arteries which may occur in any arteriosclerotic artery. Nitroglycerine may relieve pain by overcoming this spasm.

The main symptoms of angina pectoris are substernal pain, or oppression, during or immediately following exertion, with referral to the left arm, left or right side of the neck, right arm, or epigastrium. A sense of anxiety or impending death may be present. The patient remains perfectly still. Rest may relieve, or improve, the pain. The physical findings are usually meager. The pulse, blood pressure, and heart sounds may be unchanged. The diagnosis must be made on the history, character of the pain, and its relation to exertion. Death may occur during the first or subsequent attacks, and is thought to be due to ventricular fibrillation, or the shock of the pain. The electrocardiogram may be normal. The main treatment is absolute bed rest, nitroglycerine grs. 1/100 placed under the tongue, and morphine sulphate grs. 1/4 to 1/2 hypodermically.

Coronary Occlusion

Coronary occlusion is nearly always due to a thrombus formation and seldom to obliteration of an artery from progression of the arteriosclerotic process. It represents a more advanced stage of arteriosclerosis than that causing angina pectoris. Following the sudden occlusion of an artery by a thrombus, the myocardium supplied by this artery has its blood supply cut off, an anemic infarct is produced, and later this area becomes necrotic and "dies." This infarct extends through all layers of the heart, the pericardium, myocardium, and endocardium. Immediately following the thrombus, spasm again probably occurs in and around the infarcted area, and in the coronary arteries, producing severe pain. Healing takes place by invasion of the necrotic area by fibrous tissue with the formation of a scar, a process which takes from six to eight weeks. Coronary thrombosis is most

* This is the second in a series of brief articles on the heart, prepared by the Society's Committee on the Heart, for publication in The Journal.

likely to occur when the circulation is slowed down, such as during sleep. This is not always true, but it differs in this respect from angina pectoris which tends to occur following exertion.

The symptoms and signs of coronary thrombosis vary somewhat depending on how large a vessel is occluded, and which branch of the coronary arteries is affected. The anterior descending branch of the left coronary artery is most frequently thrombosed. Substernal pain is apt to come on while the patient is at rest. It may be referred similarly to the syndrome of angina pectoris. However, it is more frequently referred to the epigastrium, and frequently mistaken for indigestion, or rupture of some intra-abdominal viscus. The pain in thromboses of a small vessel may be no more than that of angina, and there may be no more shock. However, the pain tends to persist in spite of rest and other measures. In thromboses of a larger vessel, the element of shock is superimposed on the symptom of pain. The patient is apt to be restless instead of quiet. Nausea, vomiting, ashen pallor, cold, clammy, sweaty skin, feeble pulse, feeble heart sounds, and fall in blood pressure may be all present. Death may occur at once, or later. If the onset is survived, fever as much as 101 degrees or over, and leucocytoses, develop in 12 to 24 hours. Also, at the end of 24 hours, a pericardial friction rub, often present for only a short time, may be heard to the left of the sternum. This is diagnostic. The electrocardiogram taken at this time is diagnostic. The S-T segment is usually considerably altered, and differentiation from angina pectoris is usually easy. In no other condition of the heart is the electrocardiogram more diagnostic than in coronary thrombosis. When doubt exists, it is highly important to know that coronary thrombosis has occurred, for the successful treatment of this condition demands a period of prolonged and absolute bed rest of from six to eight weeks.

Sequelae of Coronary Thrombosis

Certain early and late sequelae may take place in the heart as the result of coronary thrombosis. The patient may die suddenly from recurrence of pain, shock, or acute ventricular fibrillation. The heart muscle may rupture in the necrotic infarcted area, and the patient bleed to death within the pericardial sac. This is most apt to occur several days after the initial attack at which time the infarct is most necrotic. Embolism from clot formation on the necrotic infarct within the endocardium may occur to the

lungs, brain, or other organs. The infarct may interfere with conduction of impulses through the heart muscle and heart block, auricular fibrillation, and other irregularities may develop. Congestive heart failure due to extensive myocardial damage from the infarct may ensue. Later, after partial healing, aneurysm of the heart may develop in the infarcted area.

Treatment consists of absolute bed rest for six to eight weeks with morphine at regular intervals in adequate dosage to control pain. Nitroglycerine will not control the pain of coronary thrombosis.

Congestive Heart Failure

The onset of congestive heart failure from arteriosclerotic heart disease is frequently overlooked, or misdiagnosed, because of the paucity of physical findings of the heart. A preceding history of dyspnea on exertion, and cardiac irregularities, may, or may not, be obtained. Frequently, in a patient past 60 years of age, an attack of influenza, pneumonia, or some acute respiratory infection, ushers in the onset. Asthma, intermittently or continuously, is a frequent syndrome. A great many of these patients are referred to the allergist because of an erroneous diagnosis of allergic asthma. It might be emphasized here that asthma, occurring for the first time in a patient 50 to 60 years of age or thereafter, without any preceding history of hay fever or asthma, is apt to be cardiac in origin regardless of the physical findings of the heart. Asthma here is due to left-sided heart failure with venous congestion in the pulmonary system. There may be no accompanying right-sided heart failure at first with enlarged liver and dependent edema. This may develop later, or may be present at onset of symptoms. The cardiac findings may be meager. The heart may not be enlarged. There may be no murmurs of significance. The rate may be regular and not too fast. The only finding may be a poor quality of heart beat with lack of force and tone. This at times is difficult to evaluate in elderly patients, or those with thick chests. Typical findings of asthma may be present in the lungs with dry and moist rales. At other times, cardiac irregularities, auricular fibrillation, or tachycardia, may be present. A co-existing hypertension may account for some enlargement of the heart. The blood pressure, however, may be low. The electrocardiogram usually reveals a low voltage QRS complex with lowered or prolonged S-T segment.

Treatment of congestive heart failure from arteriosclerotic heart disease is very unsatisfac-

tory because the heart is worn out and degenerated. Rest is imperative. Digitalis, aminopyllin, and sedatives are indicated. Narcotics for rest have to be used, but overdosage reduces respiration and increases cardiac anoxemia. Adrenalin and ephedrine do no good in treatment of asthma, and may do harm to the worn out heart. When edema is marked, diuretics of ammonium chloride, or ammonium nitrate, followed by salyrgan or mercupurin are indicated.

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TO DOCTORS AND DRUGGISTS

A letter from the War Production Board requests this office to send the following information to the doctors and prescription druggists of this city.

TO THE DRUGGIST:

1. If you have on hand more than 50 oz. of quinine or 50 lbs. of cinchona bark you must report this on form PD-401.
2. If you have on hand more than 10 oz. cinchonidine, quinidine and/or salts thereof, you must report this on form PD-401A.
3. Records of all supplies and sales should be kept for two years, effective April 30, 1942.

TO THE DOCTOR:

1. Order M-131, section (b).
Restrictions on the **Purchase, Sale and Use** of Quinine, Totaquine, and Cinchona Bark.
"No Person shall sell, transfer, or deliver, or purchase or accept any transfer or delivery of, or process or combine with other materials:
(1) Any quinine, except for use as an Anti-Malarial agent, or an ingredient of quinine and urea hydrochloride (U.S.P.) for hypodermic use, or an ingredient of quinine hydrochloride and urethane.
(2) Any totaquine, except for use as an anti-malarial agent."
2. Order M-131A.
Regarding Cinchonine, Cinchonidine, Quinidine, restrictions the same as above **except that** Quinidine may be used in the treatment of cardiac disorders.

TO THE DOCTOR AND DRUGGIST:

The druggist is liable to imprisonment and fine for illegal sale of the above items.

In dispensing these drugs, it becomes the druggist's responsibility to know the purpose for which they are sold.

The War Production Board suggests that physicians inform the druggists by use of symbol rather than to write the diagnosis on prescription blank, which it is realized doctors dislike doing.

The symbol **M-131** is suggested as serving the purpose.

COMING MEDICAL MEETINGS

Southern Medical Association, Richmond, Virginia, November 10-12th.

SOLDIERS' AND SAILORS' CIVIL RELIEF ACT AMENDMENTS

Prepared by the Bureau of Legal Medicine and Legislation

The Soldiers' and Sailors' Civil Relief Act was approved on October 17, 1940. Its purpose, as indicated in an analysis of it that was published in The Journal, January 24, 1942, page 306, was to free persons in military service from harassment and injury to their civil rights during their term of military service and thus to enable them to devote their entire energy to the national defense. Experience under the act, however, has disclosed many defects and shortcomings, and numerous bills have been introduced in the Congress dealing with specific problems that have arisen. A subcommittee of the House Committee on Military Affairs was appointed to study the various proposals and as a result of that study legislation was drafted, H. R. 7164, to extend the relief and benefits provided under the original act. This bill has now passed the House and Senate and was approved by the President on October 6.

In General

The new law extends benefits to transactions that have occurred since October 17, 1940. It extends benefits to persons who serve with the forces of any nation with which the United States may be allied in the prosecution of the war and who immediately prior to such service were citizens of the United States. Persons who have been ordered to report for induction under the Selective Training and Service Act will be entitled to benefits during the period beginning on the date of receipt of such an order and ending on the date on which such person reports for induction. Any member of the Enlisted Reserve Corps who is ordered to report for military service will be entitled to benefits during the period beginning on the date of receipt of such order and ending on the date on which he reports for such service. The Secretary of War and the Secretary of the Navy are required to make provision in such manner as each may deem appropriate for his respective department, to insure the giving of notice of the benefits accorded by the act to persons in and to persons entering military service.

Leases

Of particular interest to physicians is the new provision relating to leases. Under the original act no provision was made for the cancellation of leases, nor did the section relating to leases

apply to leases on property used for office purposes. The new law applies to any lease covering premises occupied for dwelling, professional, business, agricultural or similar purposes in any case in which (a) such lease was executed by or on the behalf of a person who, after the execution of such lease, enters military service and (b) the premises so leased have been occupied for such purpose or for a combination of such purposes by such person or by him and his dependents.

Any such lease may be terminated by notice in writing delivered to the lessor (or his grantee) or to the lessor's (or his grantee's) agent by the lessee at any time following the date of the beginning of his period of military service. Delivery of such notice may be accomplished by placing it in an envelope properly stamped and duly addressed to the lessor (or his grantee) or to the lessor's (or his grantee's) agent and depositing the notice in the mails. Termination of any such lease providing for monthly payment of rent will not be effective until thirty days after the first date on which the next rental payment is due and payable subsequent to the date when such notice is delivered or mailed. In the case of all other leases, termination will be effected on the last day of the month following the month in which the notice is delivered or mailed, and in such case any unpaid rental for a period preceding termination shall be proratably computed and any rental paid in advance for a period succeeding termination must be refunded by the lessor (or his assignee).

On application by the lessor to an appropriate court prior to the termination period provided for in the notice, any relief granted by the act will be subject to such modifications or restrictions as, in the opinion of the court, justice and equity may in the circumstances require.

Any person who knowingly seizes, holds or detains the personal effects, clothing, furniture or other property of any person who has lawfully terminated a lease covered by the act or in any manner interferes with the removal of such property from the premises covered by the lease, for the purpose of subjecting or attempting to subject any of the property to a claim for rent accruing subsequent to the date of termination of the lease, or attempts so to do, will be guilty of a misdemeanor and punishable by imprisonment not to exceed one year or by fine not to exceed \$1,000 or both.

Storage Liens

A new section clarifies the original act in connection with the protection of persons coming into service from foreclosure of storage liens on household goods stored for the period of military service. No person may exercise any right to foreclose or enforce any lien for storage of household goods, furniture or personal effects of a person in military service during such person's period of service and for three months thereafter except on an order previously granted by a court. In such a proceeding the court may, unless in the opinion of the court the ability of the defendant to pay the storage charges due is not materially affected by reason of his military service, (a) stay the proceedings or (b) make such other disposition of the case as may be equitable to conserve the interest of all parties.

Benefits Accorded Dependents

The dependents of a person in military service will be entitled, on application to a court therefor, to the benefits accorded to persons in military service in connection with rents, installment contracts, mortgages, liens, assignments and leases, unless in the opinion of the court the ability of such dependents to comply with the terms thereof has not been materially impaired by reason of the military service of the person on whom the applicants are dependent.

Insurance Premiums

The benefits of the act in connection with insurance premiums are extended to policies up to \$10,000 face value. In order to obtain the benefits, the insured must make written application to the Administrator of Veterans' Affairs. If the insured is outside the continental United States, excluding Alaska and the Panama Canal Zone, the beneficiary may apply for the benefits. The term "policy" is defined to include any contract of life insurance or policy on a life, endowment or term plan, including any benefits in the nature of life insurance arising out of membership in any fraternal or beneficial association. The policy must not provide for the payment of any sum less than the face value thereof or for the payment of an additional amount as premiums if the insured engages in military service. It must not contain any limitation or restriction on coverage relating to engagement in or pursuit of certain types of activities which a person might be required to engage in by virtue of his being in military service. The policy must (1) have been in force on a premium-paying basis at the time of application for benefits and (2)

must have been made and a premium paid thereon before October 6, 1942, and not less than thirty days before the date the insured entered into military service. The benefits are not applicable to policies or contracts issued under the War Risk Insurance Act, the World War Veterans Act or the National Service Life Insurance Act of 1940.

The Veterans' Administration is required to give notice to the military and naval authorities of the provisions of the act and must include in such notice an explanation of the provisions for the information of those desiring to make application for the benefits. An insured will have two years after the period of military service to repay premiums guaranteed by the government under the act. Interest on such premiums will be payable at the same interest rate as fixed in the policy for policy loans.

Miscellaneous Benefits

The section of the original act which authorized in certain circumstances the repossession of automobiles of persons in military service is repealed. A new section prohibits interest at a rate in excess of 6 per cent on obligations of persons in military service incurred prior to his entry therein. A court may grant certain relief with respect to mortgages and taxes on property owned by persons not in military service when the rent for such property is not paid by dependents of persons in military service. The protection provided by the original act in respect of taxes on real property is extended to include taxes (other than income taxes) on personal property. The requirement that such taxes must have fallen due during the period of military service has been eliminated, as has also been the requirement that the person in military service must file an affidavit with the tax collector in order to prevent sale for delinquency without court action. A new section grants to persons in military service relief for a specified period after military service in order to enable them to liquidate their liabilities in an orderly fashion and not be subject to the accrual and payment of these liabilities all at one time. The court may grant an order staying enforcement of obligations either for a period of time equal to the period of military service or, in the case of certain real estate mortgages and contracts, for a period of time equal to the remaining life of the contract plus the period of military service.—J. A. M. A., October 17, 1942.

COMMUNIQUE

October 6th, 1942

To the Editor:

Just a line. We are permitted to tell people in the States that we are on———. * Cannot mention any action stories but believe you me, the boys are doing o.k.

Hope everything is going nicely in Fort Smith.

I passed the examination for the regular navy but am not sure I want to stay in service.

Give my regards to all there.

Yours,

G. F. Stocker,

Lt., M. C., U. S. N. R.,

U. S. Marine Unit 195

Postmaster

San Francisco, California.

* Censorship regulations do not permit publication in The Journal.

CONTINUOUS CAUDAL ANESTHESIA IN OBSTETRICS

A new method for continuous or fractional caudal anesthesia has been developed by Edwards and Hingson (Am. J. Surg., 57:459, September, 1942). It appears to be remarkably effective and yet retains the complete cooperation of the patient. There has been uniform absence of delirium, narcosis, cyanosis, nausea, vomiting, and anoxemia, and no interference with uterine contractions. Every infant in the authors' series breathed spontaneously except one stillborn known to have been dead several days before delivery.

The technic consists in the injection of an initial dose of 30 cc. of 1½ per cent solution of "Metycaine" (Gamma—2-methyl-piperidino—propyl Benzoate Hydrochloride, Lilly) followed at thirty or forty minute intervals with 20 cc. of the 1½ per cent solution. In every case there has been complete freedom of pain and discomfort of active labor within five minutes following the initial dose. Episiotomy and outlet forceps, and repair of the episiotomy has been without pain. The average duration of anesthesia has ranged from four and three-quarters to thirteen hours.

One patient described was having eclamptic convulsions when admitted, with blood pressure 220/110. After the initial dose of "Metycaine" was given, the pressure declined to 140/90 and the clinical picture improved remarkably. The anesthetic was continued throughout the day without the blood pressure exceeding 150. She delivered a healthy baby spontaneously thirteen hours after the initial dose.

TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

THE IMPORTANCE of the role of the general practitioner in the eradication of tuberculosis cannot be overemphasized. Mass programs of case finding in high schools, colleges, industry and racial groups are public health functions. But there are other categories that such drag-nets do not reach. One of these is the older third of the population. They constitute no single group to be rounded up for mass examination. Yet, they contain a higher percentage of infectious cases than any other age. The family doctor alone has direct access to this reservoir of community infection. To drain it effectively and speedily his aid is indispensable.

UNDIAGNOSED TUBERCULOSIS IN ELDERLY PERSONS

Tuberculosis has been commonly considered a disease of youth. Its largest number of victims are post-adolescents and those of early middle life when super-infections most often occur. Many there are, however, who do not succumb to the disease nor yet eliminate the infection. As hosts to the tubercle bacillus they carry on an adjusted symbiotic existence which may reach into a green old age. The chronic cough attributed to "asthma" or "bronchitis" may actually be due to an indolent tuberculous process often accompanied by bacillary sputum. The menace of such occult cases to family and friends is obvious.

The detection of these cases is among the more baffling problems of a control program since experience has shown that it is difficult to obtain the examination of the elderly spreaders. They are naturally skeptical of the idea that they may be infected and often refuse examination through apathy or through fear that something may be found that would alter their customary manner of life. Commissioner Godfrey in a study of 17 counties in up-state New York found that in the cases studied 43% of the contacts under forty were examined, against only 14% of those contacts who were above that age.

"The best method of finding the elderly spreader of tuberculosis would seem to be the mass X-ray survey. Up to the present time, however, this method has not been used widely. Bloch has estimated that more than half the reports published on surveys in adults concern

themselves with university students, hospital personnel and student nurses. The majority of other surveys have been made on industrial and racial groups containing only a relatively small percentage of persons above the age of forty.

"Despite the fact that he is seldom discovered by any of the aforementioned methods of case finding, the relative frequency with which the elderly phthisic occurs in the population should make him of the greatest concern to those interested in tuberculosis control. Mortality figures for the United States, as prepared by Dublin, show that the highest death rate from tuberculosis occurs in males from sixty-five to seventy-four years of age, and in females seventy-five and over. Mortality statistics for New York City, prepared by Drolet, illustrate the fact that the decline in tuberculosis mortality since 1920 has been much greater in the young than in the old, particularly in males. The phenomenal decrease in tuberculosis among younger persons of New York City during this twenty-year period may very well reflect the efficiency of the methods used for its prevention, detection and treatments, while the high mortality of the elderly may partially be due to the fact that the same degree of emphasis has not been placed on the control of tuberculosis in this group."

At the Kips Bay-Yorkville Chest Clinic (New York City) a mass X-ray survey was made of 3,414 apparently healthy persons on home relief. The following table shows that the percentage of tuberculosis proved to be highest among those above 40 years of age.

Of the 100 clinically significant cases, 29 have proved to be active on the basis of either (1) changes in the X-ray appearance of the lesions; either progressive or regressive, and (2) positive sputum.

Twelve of the positive-sputum cases found were over 50 years of age. None of these had marked symptoms at the time they were discovered and some have remained symptom free

"More emphasis should be placed on the examination of all possible sources of a newly-diagnosed case of tuberculosis. Even when the older members of a tuberculosis household appear to be in the best of health, they should be X-rayed. When a thorough search of the immediate family of an affected person fails to reveal the source of infection, further inquiries should be made as to the identity of others with whom

Age and Sex Distribution of Chronic and Significant Pulmonary Tuberculosis

Age Group	Males					Females				
	Number examined	Chronic pulmonary tuberculosis	Per cent	Significant pulmonary tuberculosis	Per cent	Number examined	Chronic pulmonary tuberculosis	Per cent	Significant pulmonary tuberculosis	Per cent
15-19.9	133	0		0		134	0		0	
20-29.9	74	2	2.70	2	2.70	161	1	0.62	0	
30-39.9	192	11	5.73	5	2.60	314	9	2.87	5	1.59
40-49.9	257	30	11.67	17	6.61	347	17	4.90	6	1.73
50-59.9	365	44	12.05	22	6.03	418	35	8.37	10	2.39
60-69.9	350	50	14.29	17	4.86	450	49	10.89	8	1.78
70-79.9	116	20	17.24	5	4.31	84	9	10.71	3	3.57
80-84.9	9	2	22.22	0		10	2	20.00	0	
Total	1,496	159	10.63	68	4.55	1,918	122	6.36	32	1.67
Under 40	399	13	3.26	7	1.75	609	10	1.64	5	0.82
Over 40	1,097	146	13.31	61	5.56	1,309	112	8.56	27	2.06

during a subsequent two years of observation. In such cases reactivation may await some new strain such as an extra physical load imposed on the worker who enters war industry. This is a risk for the healed or arrested case as well.

"It is not known whether the higher incidence of tuberculosis in the elderly which we have encountered in a group of unemployed also occurs in elderly persons of higher income levels. Since mortality tables are prepared from deaths at all strata, it would seem possible that this may be the actual state of affairs. In any event, it is of the utmost importance to devote a greater portion of our efforts in tuberculosis case-finding to the discovery of the elderly individual with tuberculosis. This should be done without lessening case-finding measures in young persons, as the latter comprise a larger proportion of the population. Consequently, although the percentage of tuberculosis may be less in those of younger years, the absolute number of cases undoubtedly is greater.

he has most frequent contact, and examination of these persons should be arranged.

"The physician should also always suspect tuberculosis in all his elderly patients who have even mild pulmonary symptoms, and should take the necessary steps to rule out this disease before making a final diagnosis.

"The most productive method of case finding among the elderly would seem to be the X-ray survey of such population groups. The survey detailed in this paper serves to illustrate the value of such a procedure. Similar surveys concentrated on the older fraction of the population, particularly males, would, we believe, disclose many unknown spreaders of tuberculosis who have been acting as reservoirs of disease in their communities."

Undiagnosed Pulmonary Tuberculosis in Elderly Persons, Raymond E. Miller and Beatrice Henderson, Amer. Rev. of Tuberc., August, 1942.

MEMBERSHIP ROSTER OF THE ARKANSAS MEDICAL SOCIETY, 1942

ARKANSAS COUNTY

Davis, G. C.	Gillett
*Dickens, Homer	DeWitt
*Drennen, S. A.	Stuttgart
*Fowler, Arthur	Humphrey
†John, M. C., Jr.	Stuttgart
*John, M. C., Sr.	Stuttgart
*Lumsden, C. A.	DeWitt
*Rasco, C. W., Jr.	DeWitt
*Swindler, E. B.	Stuttgart
*VanDuyn, T. S.	Stuttgart
†Wassell, C. M.	U. S. N.
*Whitehead, R. H.	DeWitt
*Wilson, J. G.	Keo
Word, J. T.	Sweet Home

ASHLEY COUNTY

†Atkinson, H. H.	Crossett
*Barnes, L. C.	Hamburg
†Burt, E. G.	Camp Berkeley, Tex.
*Cockerham, H. E.	Portland
Cone, A. E.	Portland
*Crandall, M. C.	Wilmot
Fletcher, G. W.	Montrose
Hawkins, M. C.	Parkdale
*Mask, D. L.	Hamburg
Parker, J. L.	Snyder
Pool, C. S.	Malvern
†Regnier, W. A.	Crossett
Smith, M. L.	Crossett
Spivey, C. E.	Crossett
*White, E. O.	Hamburg
Wood, J. T.	Crossett

BENTON COUNTY

Atkinson, R. M.	Bentonville
†Chastain, M. W.	Bentonville
Curry, W. J.	Rogers
Dixon, C. B.	Decatur
Estes, Neal D.	Rogers
Eubanks, F. G.	Decatur
Greene, L. O.	Pea Ridge
Gulledge, J. F.	Siloam Springs
Harrison, A. J.	Springdale
Hodges, Guy	Rogers
Hughes, G. A.	Siloam Springs
†Huskins, J. D.	Fort Benning, Ga.
Love, Geo. M.	Rogers
McNeil, Clyde	Rogers
Moore, W. A.	Rogers
Peacock, A. L.	Bentonville
Pickens, James L.	Bentonville
Pickens, W. A.	Bentonville
Powell, J. T.	Gravette
Scott, L. L.	Siloam Springs
†Thompson, A. W.	Bentonville
Thompson, J. S.	Gravette
Williams, J. R.	Siloam Springs
Wilson, C. S.	Siloam Springs

BOONE COUNTY

Blackwood, J. C.	Western Grove
*Fowler, J. H.	Harrison
*Fowler, Ross	Harrison
*Fowler, T. P.	Harrison
*Gladden, J. G.	Harrison
†Jackson, Ulys	Harrison
*Kirby, H. V.	Camp Shelby, Miss.
*Morrow, J. J.	Cotter
Moore, W. T.	Everton
†McCoy, O. B.	Harrison
*Owens, D. L.	Harrison
Poynor, W. H.	Harrison
*Rust, M. E.	Harrison
*Thompson, James I.	Yellville
Watkins, W. L.	Alpena Pass
*Weast, L. M.	Yellville

BRADLEY COUNTY

Crow, Marvin B.	Warren
Crow, Marvin T.	Warren
†Crow, Merle T.	Warren
Gannaway, C. E.	Warren
Hoffman, R. F.	Iowa City
*Hunt, W. J.	Warren
Martin, Charles	Warren
Martin, Rufus	Warren
Reasons, W. B.	Hermitage
Roark, W. N.	Hermitage

CARROLL COUNTY

Boen, L. R.	Oak Grove
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- * Wife is Auxiliary member.
† Military service.
‡ Deceased.

The Roster of the Arkansas Medical Society has been placed in the center of this issue to permit its ready removal for filing.

Bohannon, J. H.	Berryville
Butt, W. A.	Green Forrest
*Carter, A. L.	Berryville
John J. F.	Eureka Springs
McCurry, D. K.	Green Forrest
†Newkirk, W. H.	Camp Berkeley, Tex.
Roberts, D. C.	Berryville
Webb, J. H.	Eureka Springs

CHICOT COUNTY

Baker, E. E.	Dermott
Barlow, B. E.	Dermott
*Barlow, E. E.	Dermott
*Bolteroff, M. K.	Lake Village
Burge, J. H.	Lake Village
Clark, B. C.	Lake Village
*Craig, W. A.	Eudora
*Douglas, S. W.	Eudora
†Easterling, W. D.	Lake Village
*Hu'son, W. J.	Eudora
†Leverett, C. G.	Eudora
McGehee, E. P.	Lake Village
*Schwarz, W. J.	Little Rock
Thompson, J. A.	Dermott

CLARK COUNTY

Barnett, J. R.	Arkadelphia
Bremer, J. P.	Point Cedar
Doane, S. N.	Arkadelphia
Magness, W. C.	Gurdon
*McLain, J. T.	Gurdon
Norton, J. M.	Arkadelphia
Pate, J. N.	Arkadelphia
*Reid, Joe W.	Arkadelphia
Ross, H. A.	Arkadelphia
*Townsend, Chas. K.	Arkadelphia

CLAY COUNTY

Blackwood, W. J.	Rector
Clopton, O. H.	Rector
†Fittrell, J. B.	Rector
Hiller, J. P.	Pollard
Jones, F. H.	Piggott
Latimer, N. J.	Corning
McGuire, J. E.	Piggott
†Turner, W. E.	Ft. Leonard Wood, Mo.
Turner, W. E., Sr.	Piggott

COLUMBIA COUNTY

Baker, J. J.	Magnolia
†Carrington, H. K.	Savannah, Ga.
Cooksey, W. P.	Magnolia
Horn, W. H.	Magnolia
Hudnall, E. T.	Taylor
Hunt, W. J.	Magnolia
Jones, T. H.	Waldo
Jordan, T. S.	Magnolia
Kitchens, H. M.	Waldo
Longino, L. A.	Magnolia
McLeod, G. F.	Magnolia
Mullins, G. E.	Emerson
Rushton, J. F.	Magnolia
Smith, P. M.	Magnolia
Souter, A. J.	Waldo
Souter, T. E.	McNeil
†Weber, Chas. L.	Magnolia
Wilson, J. H.	Magnolia

CONWAY COUNTY

Etheridge, C. E.	Morrilton
Goatcher, A. L.	Plumerville
Hardison, T. W.	Morrilton
Jones, R. A.	Perry
†Matthews, J. M.	Morrilton
Mobley, H. E.	Morrilton
Scarlett, W. P.	Morrilton
†Williams, C. R.	Morrilton

CRAIGHEAD-POINSETT COUNTY

Alcott, Geo. B.	Weiner
†Barrett, E. R.	
Berry, W. E.	Trumann
†Blanton, M. E.	Ft. Sam Houston, Tex.

Burge, H. G.	Nettleton
Campbell, G. O.	Trumann
Cantrell, M. L.	Marked Tree
Cohen, O. T.	Jonesboro
Elders, J. W.	Harrisburg
Ellis, Ira W.	Monette
†Faris, John C.	Jonesboro
Horner, E. J.	Jonesboro
Jones, J. K.	Lepanto
Lutterloh, P. W.	Jonesboro
McAdams, H. H.	Jonesboro
McCurry, J. H.	Cash
McDaniel, E. C.	Tyroneza
McDaniel, L. H.	Tyroneza
Modelovsky, A. C.	Jonesboro
Moreland, W. H.	Tyroneza
Nisbett, Frank	Brookland
Overstreet, W. C.	Jonesboro
†Pierce, J. O.	Albany, Ga.
Ramsey, J. W.	Jonesboro
†Ratliff, R. W.	Jonesboro
†Reagan, C. H.	U. S. A.
Reves, L. E.	Monette
Shanlever, R. C.	Jonesboro
Sloan, Ralph	Jonesboro
Smith, O. V.	Trumann
Stroud, E. J.	Jonesboro
Stroud, H. A.	Jonesboro
Stroud, P. T.	Jonesboro
Thorn, W. T.	Marked Tree
Tullos, A. M.	Trumann
Verser, Joe	Harrisburg
Verser, W. W.	Harrisburg
Willett, R. H.	Jonesboro

CRAWFORD COUNTY

Bayan, C. E.	Mountainburg
Bennett, B. L.	Van Buren
*Bruce, B. B.	Alma
Boomer, F. A.	Van Buren
Campbell, C. J.	Mulberry
Crigler, J. R.	Alma
Galloway, Q. R.	Alma
Grant, S. C.	Mulberry
Kirkland, S. D.	Van Buren
†Kirkland, S. S.	Camp Berkeley, Tex.
Kirksey, O. J.	Mulberry
†Post, J. L.	Van Buren
Savery, H. W.	Van Buren
†Stewart, J. M.	Van Buren
Young, L. G.	Van Buren

CRITTENDEN COUNTY

Bond, S. D., Jr.	Crawfordsville
Hamilton, Ralph	West Memphis
Hare, T. S.	Crawfordsville
McVay, L. C.	Marion
Parker, A. C.	Clarkdale
Purnell, R. L.	Marion
Ray, R. H.	Earle
Stevenson, B. M.	West Memphis
Watson, H. S.	Earle

CROSS COUNTY

Barr, A. F.	Cherry Valley
Griffin, W. L.	Cherry Valley
Hickman, R. L.	Hickory Ridge
Longest, Ruffin	Wynne
Miller, J. S.	Parkin
Peterson, T. A.	Wynne
Price, Thomas	Wynne
Smith, R. S.	Parkin
Wilson, Thomas	Wynne

DALLAS COUNTY

Cheatham, H. A.	Princeton
Ellis, W. S.	Fordyce
Estes, E. E.	Fordyce
Lisenbee, A. M.	Sparkman
Taylor, J. E. M.	Sparkman
†Ward, W. P.	Ft. McIntosh, Tex.

DESHA COUNTY

*Biscoe, Gibbs	Dumas
Chennault, J. C.	McGehee
*Hellums, J. H.	Ft. Cronhite, Calif.
Kimbro, C. H.	Tillar
*Leverett, Marion	McGehee
MacCammon, Vernon	Ark. City
*Rands, H. A.	Dumas
*Smith, H. T.	McGehee
White, R. F.	McGehee

DREW COUNTY

†Binns, B. Z.	Ft. Benning, Ga.
Clarke, A. S. J.	Monticello

Collins, A. S. J.	Monticello
Dickins, R. D.	Monticello
†Gates, S. M.	Camp Chaffee, Ark.
†Holder, J. B.	New Orleans, La.
Pope, M. Y.	Monticello
*Price, J. P., Jr.	Monticello
*Wilson, J. S.	Monticello

FAULKNER COUNTY

Baldrige, Doris Alene	Conway
†Baldrige, Max	U. S. N.
Brittain, W. L.	Conway
†Brooke, H. C.	Camp Young, Calif.
Dawson, R. L.	Bee Branch
Dickerson, C. H.	Conway
Downs, J. H.	Vilonia
†Dunaway, E. L.	Ft. Sam Houston, Tex.
Dunaway, L. S.	Conway
Fraser, N. E.	Conway
Harrod, George	Conway
Henderson, G. L.	Conway
Ingram, E. M.	Enola
Kitley, J. R.	Mayflower
Lieblong, J. S.	Greenbrier
Mabry, Tom	Vilonia
McCollum, I. N.	Conway
†Taylor, R. L.	Camp Berkeley, Tex.
†Westerfield, J. S.	Conway

FRANKLIN COUNTY

Bollinger, W. H.	Charleston
*Gibbons, W. H.	Ozark
Jewell, I. H.	Paris
*Pillstrom, E. W.	Ozark
*Porter, W. C.	Ozark

GARLAND COUNTY

†*Adams, Frank M.	Dillon, S. C.
Bieri, E. J.	Hot Springs
Black, T. N.	Hot Springs
Blackshare, W. M.	Hot Springs
Bollmeier, L. N.	Hot Springs
†Boydstone, J. O.	Camp Polk, La.
†Brewer, Howell	Seattle, Wash.
Browning, E. R.	Hot Springs
Burch, N. B.	Hot Springs
†Burton, F. M.	Washington, D. C.
*Casada, B. F.	Hot Springs
†Chamberlain, W. W.	Jacksonville, Fla.
Chesnutt, J. H.	Hot Springs
Clardy, Floyd	Hot Springs
Coffey, G. C.	Hot Springs
Collings, H. P.	Hot Springs
Connell, W. H.	Hot Springs
Drich, Vied	Hot Springs
†Ellis, Jack	Hot Springs
Ellis, L. R.	Hot Springs
*Garratt, C. E.	Hot Springs
*Gray, W. E.	Hot Springs
Hebert, G.	Hot Springs
Jarrell, Foster	Hot Springs
†King, L. E.	Hot Springs
King, O. H.	Hot Springs
Klugh, W. G.	Hot Springs
Lee, D. C.	Hot Springs
†Lutterloh, C. H.	St. Petersburg, Fla.
Martin, L. G.	Hot Springs
Moss, C. S.	Hot Springs
*Nims, C. H.	Hot Springs
Pate, C. N.	Hot Springs
Porter, W. F.	Hot Springs
†Power, A. R.	Hot Springs
*Proctor, J. M.	Hot Springs
Purdum, E. A.	Hot Springs
*Reed, L. E.	Hot Springs
*Rowland, Driver	Albany, Ga.
*Rowland, J. F.	Hot Springs
†Scott, J. O.	Hot Springs
Scully, F. J.	Hot Springs
Shaw, Ernest	Hot Springs
†Smallwood, R. E.	Hot Springs
†Smith, E. M.	Houston
†Smith, O. A.	Hot Springs
Stell, J. S.	Hot Springs
*Stough, D. B.	Hot Springs
*Strachan, J. B.	Hot Springs
†Sullivan, A. G.	Pensacola
Tarleton, F. S.	Hot Springs
*Tribble, A. H.	Hot Springs
†Ulferts, U. R.	Hot Springs
Wilkins, J. S.	Hot Springs
*Wootton, W. T.	Hot Springs

GRANT COUNTY

Cole, C. F.	Prattville
Cole, John W.	Sheridan
Cox, J. E.	Leola
Hope, O. W.	Sheridan
†Kelly, M. F.	Hot Springs
Kelly, O. R.	Sheridan
†Kelly, R. M.	Seattle, Wash.

GREENE COUNTY

Blackwood, J. D.	Jonesboro
Bridges, G. P.	Paragould
†Cupp, R. W.	Marmaduke
Dillman, J. A.	Paragould
Ellington, W. E.	Paragould
Haley, R. J., Jr.	Paragould
†Haley, R. J., Sr.	Paragould
†Hardesty, C. A.	Paragould
Huddins, J. J.	Paragould
Hutcherson, R. L.	Delaplaine
†Lamb, J. W.	Salt Lake City, Utah
Lamb, W. M.	Paragould
McKelvey, Earle D.	Paragould

HEMPSTEAD COUNTY

*Allison, W. G.	Hope
†Branch, J. W.	Camp Chaffee, Ark.
Cannon, G. E.	Hope
Carrigan, P. B.	Hope
*Gentry, J. E.	McCaskey
*Lile, L. M.	Hope
Martindale, J. G.	Hope
*†McKenzie, Jim	Louisville, Ky.
Robins, W. F.	Ozan
*Smith, Don	Hope
†Weaver, J. H.	Hope

HOT SPRING COUNTY

Barrier, W. F.	Malvern
Brown, H. L.	Malvern
Hodges, W. G.	Malvern
Kolb, Agnes C.	Malvern
Kolb, B. T.	Malvern
McCray, E. H.	Malvern
McCray, R. V.	Malvern
Prickett, M. D.	Malvern

HOWARD-PIKE COUNTY

Alford, T. F.	Murfreesboro
Dildy, E. V.	Nashville
Duncan, M. D.	Murfreesboro
Gibson, W. M.	Nashville
Gould, W. B.	Glenwood
†Holcombe, J. T.	Mineral Springs
Holt, H. H.	Nashville
Hopkins, J. S.	Nashville
Roberts, J. L.	Nashville
Simpson, W. B.	Nashville
Wood, R. L.	Malvern

INDEPENDENCE COUNTY

†Barger, O. B.	Philadelphia, Pa.
†Barnett, J. C.	Corpus Christi, Tex.
*Bone, O. L.	Newark
Buell, Louis	Batesville
Calaway, Hickman	Bethesda
Chambers, S. W.	Mountain Home
*†Churchill, C. A.	Louisville, Ky.
Copp, Noel	Calico Rock
*Craig, M. S.	Batesville
*Evans, L. T.	Batesville
Gray, E. M.	Mountain Home
*†Gray, F. A.	Batesville
Gray, W. Paul	Batesville
*Hinkle, C. G.	Batesville
*Jeffery, Paul	Bethesda
*Johnston, O. J. T.	Batesville
Jones, W. A.	Los Angeles, Calif.
*Ketzel, W. J.	Batesville
*McAdams, V. D.	Cord
*†Monfort, J. J.	South Carolina
Robertson, S. N.	Sulphur Rock
Roe, C. E.	Viola
Weathers, J. L.	Salem
*†Weddington, R. E.	New Orleans, La.
Wilson, W. H.	Griffithville
Wood, O. S.	Salem
†Wyatt, F. Q.	Batesville

JACKSON COUNTY

Best, A. L.	Newport
Elton, A. M.	Newport
Erwin, I. H.	Newport
Gray, C. R.	Newport
Harris, M. L.	Newport
Ivy, J. B.	Tuckerman
Jamison, O. A.	Tuckerman
Justice, S.	Swifton
Kimberlin, K. K.	Tuckerman
Morris, R. O.	Tuckerman
Owens, M. C.	Newport
Pierce, W. N.	Tuspele
Stephens, G. K.	Newport
Walker, H. O.	Newport
Watson, E. L.	Newport

JEFFERSON COUNTY

*Beard, J. C.	Pine Bluff
†Binns, Van C.	Ft. Bliss, Tex.
*Bryce, W. H.	Pine Bluff
Capel, C. B.	Pine Bluff
*†Capel, H. T.	U. S. A.
Carruthers, C. K.	Pine Bluff
*†Causey, H. A.	Pine Bluff
*Clark, O. W.	Pine Bluff
*Cunningham, T. J., Jr.	Pine Bluff
Cunningham, T. J., Sr.	Pine Bluff
Dunman, B. E.	New Edinburg
Garratt, A. A.	Pine Bluff
*Hames, Fred	Pine Bluff
†Hankinson, O. C.	Pine Bluff
*Hancock, W. G.	Pine Bluff
Higginbotham, C. J.	Pine Bluff
Jenkins, J. S.	Pine Bluff
†John, J. W.	Pine Bluff
Lemons, J. M.	Pine Bluff
*Lowe, W. T.	Pine Bluff
Luck, B. D., Jr.	Pine Bluff
Luck, B. D., Sr.	Pine Bluff
*†Maynard, R. E.	Ft. Crook, Neb.
McMullen, E. C.	Pine Bluff
Palmer, J. T.	Pine Bluff
*Payne, Virgil	Pine Bluff
Robertson, A. B.	Rison
*†Russell, A. R.	Ft. Riley, Kans.
Ruth, Junius	Rison
Shelton, M. A.	Wabbaseka
Simmons, Walter	Pine Bluff
*Snoogress, W. A., Jr.	Pine Bluff
*Spillyards, J. S.	Pine Bluff
*Walker, J. K.	Pine Bluff
Wood, R. P.	Altheimer

JOHNSON COUNTY

Burgess, M. E.	Phoenix, Ariz.
Floyd, John	Ozark
Graves, S. M.	Mt. Levi
*Harograde, Geo. L.	Clarksville
*Hunt, Earle H.	Clarksville
*†Johnston, R. H.	New Orleans, La.
King, R. E.	Harmony
*†Kolb, J. M.	Clarksville
Kolb, J. S.	Clarksville
Nichols, J. P.	Hagarville
Pierce, S. C.	Lamar
*†Shrigley, Guy	Santa Barbara, Calif.
Siegel, G. R.	Clarksville

LAFAYETTE COUNTY

Armstrong, R. L.	Lewisville
Baker, F. E.	Stamps
Keith, A. W.	Stamps
McKnight, J. F.	Bradley

LAWRENCE COUNTY

Ball, C. C.	Ravenden
Blaine, Mitchell	Mammoth Spring
Brown, W. W.	Hardy
Cruse, E. J.	Black Rock
†Elders, J. B.	Camp Forrest, Tenn.
Guthrie, T. C.	Smithville
Hatcher, W. W.	Imboden
Henderson, A. G.	Imboden
†Hughes, Max	Ft. Benning, Ga.
Hull, H. B.	Mammoth Spring
†Johnson, J. F.	Ft. Benning, Ga.
Johnson, T. Z.	Walnut Ridge
Kendall, W. S.	Cave City
Land, J. C.	Walnut Ridge
Martin, J. A.	Hoxie
Merrell, J. L.	Hoxie
Tibbels, C. D.	Black Rock
Townsend, C. C.	Walnut Ridge
Watkins, G. Max	Walnut Ridge

LEE COUNTY

Bogart, H. B.	Marianna
Chaffin, C. W.	Moro
Crawford, W. S.	Marianna
Hamner, J. H.	Aubrey
Hodge, N. C.	Marianna
McClendon, Mac	Marianna

LINCOLN COUNTY

Bailey, B. L.	Star City
Dixon, C. W.	Gould
Ringgold, G. W.	Gould
Taylor, L. T.	Star City
Thiolliere, A. C.	North Little Rock
Wood, G. C.	Grady

LITTLE RIVER COUNTY

Hamm, Pat	Ashdown
Harding, C. A.	Ashdown
King, E. R.	Ashdown

†Ringgold, J. W. Ashdown
†Routon, B. C. Foreman
Yates, E. W.

LONOKE COUNTY

Beatty, S. S. England
Callahan, E. A. Carlisle
Corn, F. A. U. S. A.
Crowgey, W. B. Scott
Southall, S. A. Lonoke
Ward, O. D. England
Watson, A. C. Benton
Whaley, E. S. Carlisle

MILLER COUNTY

Abrams, H. K. Texarkana
Burnett, J. W. Texarkana
Collom, S. A. Texarkana
Daniel, N. B. Texarkana
Daubs, W. H. Texarkana
Good, L. P. Texarkana
Hibbitts, Wm. Texarkana
Hunt, Preston Texarkana
Kirkpatrick, R. R. Texarkana
Kemp, Karlton Texarkana
Kittrell, T. F. Texarkana
Kosminsky, L. J. Texarkana
Lanier, L. H. Texarkana
Laws, C. S. Texarkana
Lee, A. G. Texarkana
Lennard, F. M. Texarkana
Middleton, B. C. Texarkana
Murry, H. E. Texarkana
Parsons, G. W. Texarkana
Priest, P. D. Texarkana
Robins, R. R. Texarkana
Porter, J. T. Texarkana
Smith, W. D. Texarkana
Williams, J. F. Texarkana

MADISON COUNTY

Counts, G. D. Wesley
Hill, N. J. Hindsville
Youngblood, Fred Huntsville

MISSISSIPPI COUNTY

Atkinson, G. S. Blytheville
Atkinson, George San Francisco, Calif.
Beasley, J. E. Washington, D. C.
Boyd, D. L. Blytheville
Brownson, J. F. Blytheville
Dickerson, D. A. Marked Tree
Campbell, J. H. Marvell
Ellis, N. B. Wilson
Fox, V. R. Leachville
Frost, I. N. Dyess
Harris, Charles P. Leachville
Harwell, C. M. Osceola
Hassell, L. L. Blytheville
Hosey, N. R. Marvell
Hubener, L. L. Blytheville
Hudson, T. F. Luxora
Husband, F. L. Blytheville
Johnson, I. R. Blytheville
Johnson, R. L. Bassett
MaGuire, F. C., Jr. Manhattan, Kans.
Mahan, T. K. San Francisco, Calif.
Massey, L. D. U. S. A.
Moseley, K. T. Blytheville
Polk, J. T. Keiser
Robinson, A. F. Leachville
Robinson, H. D. Manila
Saliba, J. A. Blytheville
Sims, H. C. Blytheville
Skaller, M. L. Blytheville
Smith, F. D. Blytheville
Stevens, C. C. Blytheville
Tidwell, J. L. Dell
Turrentine, Portis Wilson
Walls, J. M. Camp Gruber, Okla.
Webb, Floyd Blytheville
Wilson, C. E. Blytheville

MONROE COUNTY

*Boswell, W. L. Clarendon
Bradley, W. T. Blackton
Dalton, M. L. Brinkley
Martin, W. H. Holly Grove
McKnight, C. H. Brinkley
McKnight, E. D. Brinkley
Murphey, N. E. Clarendon

MONTGOMERY COUNTY

Freeman, W. D. Mt. Ida
McLean, J. H. Caddo Gap
Redman, John W. Ft. Smith
Stueart, J. B. Norman
Watkins, G. E. Mt. Ida

NEVADA COUNTY

Archer, C. A., Jr. Prescott
*Buchanan, A. S. Prescott
*Hairston, G. G. New York
*Harrell, L. J. Bauxite
*Hesterly, J. B. Prescott
*Hirst, O. G. Sherman, Tex.
Kennedy, J. W. Prescott
McDaniel, W. F. Boughton
Pool, W. B. H. Bodcaw

OUACHITA COUNTY

*Byrd, E. J. Bearden
*Clemens, J. P. Stephens
Dalton, P. J. U. S. N.
*Early, C. S. Camden
*Jameson, J. B. Camden
*Kennerly, R. C. Camden
*McGill, S. D. Camden
*Parlee, N. G. Camden
Plunkett, C. M. Camden
*Powell, B. V. Camden
*Rhine, T. E. Thornton
*Rinehart, J. S. Camden
*Robins, R. B. Camden
*Robins, R. R. Camden
Rushing, J. L. Chidester
Thompson, H. F. Bearden
*Thompson, S. A. Camden

PHILLIPS COUNTY

Baker, J. P. West Helena
Blackwood, J. W. Baltimore, Md.
Butt, J. W. Helena
Connolly, W. B. U. S. A.
Cox, A. E. He'ena
Cov, A. W. Helena
Dozier, F. S. New York
Ellis, J. B., Sr. Helena
Ellis, W. A. Helena
Fink, M. Helena
Herron, J. T. Helena
Johnston, W. W. Manhattan, Kans.
King, Jack Jefferson Barracks, Mo.
King, J. A. Elaine
King, J. W. Helena
King, W. C. Helena
Kultgen, Edward Elaine
Maddox, A. H. Elaine
Nicholls, J. W. Helena
Norton, E. F. Marvell
Orr, W. R. Helena
Parker, O. Wabash
Rightor, H. H. Helena
Russwurm, W. C. Helena
Storm, Geo. R. Helena

POLK COUNTY

Campbell, C. A. Mena
Hawkins, B. H. Mena
Heller, H. G. Hope
Hilton, J. G. Mena
Lee, F. A. Vandervoort
McElroy, F. O. Mena
Miers, E. M. Mena
Nisbett, J. M. Ft. Sill, Okla.
Norwood, Frank A. Mena
Redman, Pierre Mena

POPE-YELL COUNTY

Ballenger, W. E. Plainview
Gardner, Ellis State Sanatorium
*Gardner, L. Russellville
Gillum, A. D. Bellville
Grace, Kent Carlisle Barracks, Pa.
Griffin, E. P., Jr. New Orleans, La.
Haney, A. C. Russellville
*Hood, Robert Russellville
Hunt, E. C. Ola
Moore, J. H. Delaware
Millard, Roy I. Russellville
Montgomery, H. L. Gravelly
Sexton, J. W. Dover
Smith, R. L. Russellville
Smith, L. M. Russellville
Stanford, J. M. Russellville
Tate, A. B., Sr. Russellville
Teeter, B. R. Camp Claiborne
Young, W. O., Jr. Russellville

PRAIRIE COUNTY

Adams, Edward DeValls Bluff
Calley, J. H. Omaha, Neb.
Gilliam, J. C. Des Arc
Lynn, J. R. Hazen
Parker, W. M. Hot Springs
Porter, T. G. Hazen

PULASKI COUNTY

*Aday, J. Leo Little Rock
Agar, John S. Corpus Christi, Tex.

Alford, T. Dale Little Rock
*Allen, Estes Little Rock
*Allen, H. R. Little Rock
Anderson, C. C. Little Rock
Anderson, R. R. Little Rock
*Arkebauer, C. Little Rock
*Armstrong, H. M. Houston, Tex.
*Askew, J. B. Little Rock
Atkinson, Shelby North Little Rock
*Autry, D. H. Camp Robinson, Ark.
*Autry, G. P. Little Rock
Banks, Jeff Little Rock
*Barrier, L. F. Little Rock
*Bennett, B. A. U. S. A.
Bizzell, Ross Little Rock
Blakely, R. M. Little Rock
Blankfort, Gerald New York
*Briggs, B. P. Little Rock
Brooks, C. M. Little Rock
Brown, Martha M. Little Rock
*Brown, T. D. Lincoln, Neb.
Buckelew, H. H. Hot Springs
Burgess, T. E. Little Rock
Burns, W. M. Little Rock
Calcote, R. J. San Francisco, Calif.
Caldwell, Robert Little Rock
Carruthers, F. W. Little Rock
*Cazort, Allen G. Little Rock
Cheairs, D. T. Little Rock
Chesnutt, C. R. Little Rock
*Choate, H. L. Little Rock
*Church, B. L. North Little Rock
*Clark, A. C. Little Rock
Compton, J. N. Little Rock
Coon, A. V. Little Rock
*Cook, R. C. Pensacola, Fla.
*Cope, E. P. Grand Prairie, Tex.
*Cosgrove, K. W. Little Rock
*Crawford, J. B. Little Rock
Cull, S. T. W. Little Rock
*Cullen, P. T. Little Rock
*Cummins, Bryce Little Rock
*Cunningham, J. C. Little Rock
Daly, M. G. Little Rock
Darby, W. J. New York
Darnall, R. F. Little Rock
Davis, J. C. Little Rock
*Day, E. O. Little Rock
Dean, G. O. Little Rock
Dibrell, J. L. Little Rock
Dibrell, J. R. Little Rock
Dishongh, H. A. Little Rock
*Donaldson, J. K. Little Rock
Dykstra, D. W. Little Rock
Easley, E. J. McCombs, Miss.
*Eaton, John P. Little Rock
Eschweiler, Paul C. Little Rock
*Eubanks, R. M. Little Rock
Fatherree, L. L. Little Rock
Ferguson, R. L. Edgewood, Md.
Fletcher, Elizabeth Little Rock
*Fowler, H. D. Camp Grant, Ill.
Freedman, Theo Little Rock
*Fuller, H. L. Little Rock
*Fulmer, D. W. Little Rock
*Fulmer, P. M. Little Rock
Fulmer, S. C. Little Rock
Gann, Dewell, Jr. Little Rock
*Gay, E. C. Ft. Leonard Wood, Mo.
*Gray, A. F. Little Rock
Gray, Oscar Little Rock
Grayson, W. B. Little Rock
Greutter, J. B. Ft. Sill, Okla.
*Hardeman, D. R. Little Rock
*Harrell, W. B. Canal Zone
Harris, F. W. Little Rock
*Hays, J. D. Little Rock
*Henry, C. R. Little Rock
*Higgins, H. A. Little Rock
*Hollenberg, H. G. Brigham, Utah
*Hollis, N. T. Little Rock
Holmes, G. M. Little Rock
*Hoover, P. W. Little Rock
Hummel, H. G. Little Rock
*Hundley, John M. San Francisco, Calif.
Hundling, H. W. Little Rock
*Hyatt, C. L. Camp Murray, Wash.
Hyatt, D. T. Little Rock
*Hyatt, R. F. Seattle, Wash.
*Johnson, Glenn H. Little Rock
*Jones, H. Fay H. Little Rock
Jones, J. E. Little Rock
Junkin, S. P. Little Rock
Kearney, Pauline Little Rock
Kilbury, M. J. Little Rock
*Kober, W. M. South Dakota
Kolb, A. C. Little Rock
Korv, R. C. Little Rock
*Lamb, W. A. Little Rock

*Langston, W. C.	Little Rock
*Law, R. A.	Little Rock
†Levy, J. S.	Ft. Bliss, Tex.
Lewis, G. V.	Little Rock
†Lyons, V. E.	Little Rock
*Mahoney, P. L.	Little Rock
*May, C. B.	Little Rock
†Mazzanti, Vincent	Little Rock
*McCaskill, M. E.	Little Rock
†McClain, M. D.	Ft. Riley, Kans.
†McLochlin, R. E.	Washington, D. C.
Melson, Madeline	Little Rock
Melson, O. C.	Little Rock
†Moore, Rufus D.	Camp Young, Calif.
Morgans, Dollie	Little Rock
*Murphy, Pat	Little Rock
*Newman, W. V.	Little Rock
†Nixon, Ewing	San Francisco, Calif.
Nowlin, W. A.	Roland
*Oates, C. E.	Little Rock
*Parsons, J. E.	Little Rock
*Parsons, W. R.	San Antonio, Tex.
*Patterson, R. Q.	Little Rock
Phillips, Sam	Little Rock
Phipps, W. E.	North Little Rock
†Raley, B. V.	Pensacola, Fla.
†Raney, T. J.	U. S. A.
*Reagan, G. W.	Little Rock
*Reagan, L. D.	Little Rock
*Reaves, B. J., Jr.	Little Rock
*Reed, C. C., Jr.	Little Rock
*Reed, C. C., Sr.	Little Rock
*Rhinehart, B. A.	Little Rock
*Rhinehart, D. A.	Little Rock
*Richardson, W. R.	Little Rock
†Riegler, N. W.	Little Rock
†Riggins, W. C.	Camp Robinson
†Ritchie, E. J.	Camp Grant, La.
†Roberts, J. N.	Ft. Knox, Ky.
*Robinson, B. L.	Little Rock
†Rogers, Clyde D.	Little Rock
*Rosenbaum, Carl A.	Little Rock
*Rowland, R. E.	Little Rock
*Sadler, W. L.	Little Rock
*Samuel, John	U. S. A.
†Sanderlin, J. H.	Little Rock
†Sanford, S. M.	Hot Springs
†Savage, H. W.	Little Rock
*Saxon, R. L.	Little Rock
*Shipp, A. C.	Little Rock
*Shipp, Harvey	Corpus Christi, Tex.
*Shuffield, J. F.	Little Rock
*Shukers, C. F.	Camp Rucker, Ala.
*Smith, J. W.	Wilmington, Del.
*Smith, R. T.	Little Rock
Smith, W. M.	Little Rock
*Snodgrass, W. A.	Little Rock
Sparks, A. R.	Little Rock
Stathakis, John	Lincoln, Neb.
*Stern, Howard S.	Little Rock
*Stewart, H. V.	Little Rock
Stover, A. R.	Holbrook, Ariz.
*Strauss, A. W.	Little Rock
*Summers, J. A.	Little Rock
*Switzer, D. M.	North Little Rock
Thomas, P. E.	Little Rock
*Thompson, E. I.	Little Rock
Thompson, G. D.	Little Rock
†Vinsonhaler, Frank	Little Rock
Wallis, Chas.	Little Rock
*Watkins, John G.	Little Rock
Watson, C. F.	Little Rock
†Washburn, A. M.	U. S. A.
*Wayman, A. K.	Little Rock
*Wayne, J. R.	Little Rock
Webb, V. T.	Little Rock
†White, E. H.	Little Rock
Wickard, C. P.	Little Rock
†Young, R. G.	Little Rock

RANDOLPH COUNTY

Baltz, M. A.	Pocahontas
Brown, J. W.	Pocahontas
Finney, C.	Maynard
Hamil, W. E.	Pocahontas
†Handley, E. L.	Pocahontas
†Loftis, W. O.	Little Rock
†Ryburn, J. W.	Pocahontas
Smith, J. E.	Reyno
Smith, R. O.	Biggers

ST. FRANCIS COUNTY

†Bogart, C. N.	Forrest City
†Bogart, J. A.	Forrest City
Burch, W. D.	Hughes
Caldwell, A. B.	Forrest City
Chaffin, E. J.	Hughes
Davis, Luther	Walnut Ridge
Davidson, J. S.	Forrest City

Lanier, Paul S.	Round Pond
McClendon, L. H.	Palestine
McCown, N. C.	Forrest City
Mohler, D. A.	Palestine
†Powell, C. V.	Forrest City
Rush, J. O.	Forrest City

SALINE COUNTY

Blakely, M. M.	Benton
Buckley, E. A.	Bauxite
*Buffington, T. E.	Benton
Curtis, W. C.	Benton
Gann, Dewell, Sr.	Benton
*Jones, C. W.	Benton
Little, Jess	Fort Smith
Phillips, B. L.	Little Rock
Ward, W. W.	Alexander
Walton, Chas.	Gulfport, Miss.

SCOTT COUNTY

Bevill, Cheves	Waldron
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SEARCY COUNTY

Bing, E. A.	Marshall
Cotton, J. O.	Leslie
Daniel, S. G.	Marshall
Evans, P. L.	Marshall
Rogers, W. F.	St. Joe
Wood, E. W.	Marshall

SEBASTIAN COUNTY

*Adams, W. F.	Fort Smith
†Amis, J. W.	U. S. N.
Arnold, W. O.	State Sanatorium
Barker, H. M.	State Sanatorium
Benefield, C. E.	Fort Smith
Benefield, J. H.	Fort Smith
Billingsley, C. B.	Fort Smith
*Blair, A. A.	Fort Smith
*Brooksher, W. R.	Fort Smith
*Chamberlain, C. T.	Fort Smith
Coffman, J. S.	Lavaca
*Crigler, R. E.	Fort Smith
Dickey, A. B.	State Sanatorium
*Dorsey, H. C.	Fort Smith
*Eberle, W. G.	Fort Smith
*Hinney, C. H.	U. S. A.
*Foitz, T. P.	U. S. N.
*Foster, M. E.	Fort Smith
*Goldstein, D. W.	Fort Smith
*Hall, C. W.	Greenwood
Henry, Louise	Fort Smith
†Henry, L. M.	San Antonio, Tex.
†Hederick, Rogers	Ft. Barrancas, Fla.
Hibbard, R. J. B.	State Sanatorium
*Hoge, A. F.	Fort Smith
Hollingsworth, G. F.	Hampton
*Holt, C. S.	Fort Smith
Holt, Ernest E.	State Sanatorium
†Honomichl, O. R.	Hackett
Johnson, Hugh	Fort Smith
†Johnson, J. D.	Ft. Snelling, Minn.
*Jones, I. F.	Fort Smith
Jones, E. B.	Hartford
*Kellum, J. L.	Fort Smith
Kennedy, C. H.	Fort Smith
*Krock, F. H.	U. S. N.
*McConnell, S. P.	Booneville
Means, C. S.	Fort Smith
*Moulton, E. C.	Fort Smith
Moulton, R.	Fort Smith
Nowlin, H. R.	State Sanatorium
†Pride, Ben H.	Las Vegas, Nev.
Riley, J. D.	State Sanatorium
*Rose, W. F.	Fort Smith
†Schirmer, R. E.	Camp Chaffee, Ark.
Scott, M. H.	Fort Smith
*Smith, H. H.	Fort Smith
†Shippey, W. L.	U. S. A.
*Southard, J. S.	Fort Smith
*Stevenson, J. E.	Fort Smith
†Stocker, G. F.	U. S. N.
*Stubbs, S. P.	Fort Smith
Thompson, H. B.	Fort Smith
*Ware, B. L.	Fort Smith
*Wilson, C. L.	U. S. A.
*Wolfermann, S. J.	Fort Smith
*Woods, G. G.	Huntington
*Woods, W. M.	U. S. A.

UNION COUNTY

*Atkinson, O. L.	Hampton
*Cathey, A. D.	El Dorado
Cullins, J. G.	N. Chicago, Ill.
†Cox, Vincent M.	U. S. A.
*Debolt, G. C.	El Dorado
*Fincher, L. G.	El Dorado
*Harper, J. W.	El Dorado
Irby, F. L.	El Dorado

†Jones, Gus	Ft. Benning, Ga.
*Kennedy, C. E.	Smackover
Kitchens, D. K.	Detroit, Mich.
*Levine, David	El Dorado
*Mahony, F. O.	El Dorado
*Mayfield, H. F.	Huttig
†Mayfield, H. J.	El Dorado
*McGraw, S. J.	El Dorado
*Mitchell, J. G.	El Dorado
Moore, B. L.	El Dorado
*Moore, J. A.	El Dorado
*Munn, E. J.	El Dorado
†Murphy, G. D., Jr.	Jefferson Brks., Mo.
Murphy, H. A.	El Dorado
*Muse, P. H.	Junction City
*Newton, W. L.	Smackover
†Patton, Doyle	Ft. Ord, Calif.
†Pinson, J. H.	West Palm Beach, Fla.
Doole, Belle D.	El Dorado
*Riley, W. S.	New York
*Russell, M. V.	El Dorado
Sheppard, Jack	El Dorado
Smith, D. V.	Crossett
†Wharton, J. B.	Corpus Christi, Tex.
*Wharton, J. B., Sr.	El Dorado
*White, D. E.	El Dorado
Wozencraft, W. L.	El Dorado

SEVIER COUNTY

*Archer, C. A.	DeQueen
*Dickinson, R. C.	Horatio
†Hanchey, C. C.	Camp Crowder, Mo.
*Hendricks, J. S.	DeQueen
†Hendrix, B. E.	Gillham
*Hopkins, R. L.	DeQueen
*Jones, I. G.	DeQueen
*Kimball, G. L.	DeQueen
*Kitchens, C. E.	DeQueen
Livingston, S. R.	Santa Rita, N. Mex.
Norwood, M. L.	Lockesburg

WASHINGTON COUNTY

Alexander, Gilbert	Muskogee, Okla.
Baggett, Jeff	Prairie Grove
Bean, J. L.	Lincoln
Bunch, W. L., Jr.	Fayetteville
*Butt, W. J.	Fayetteville
*Callen, C. B.	Fayetteville
†Compton, Neil	U. S. N.
*Ellis, E. F.	Fayetteville
Farrior, L. B.	Fayetteville
Gilbert, A. A.	Fayetteville
†Harr, H. T.	Fayetteville
*Hathcock, Alfred	Fayetteville
*Hathcock, Preston	Fayetteville
*Hathcock, P. L.	Fayetteville
*Henry, R. T.	Springdale
*Huntington, R. H.	Fayetteville
Lesh, Ruth Ellis	Fayetteville
Lesh, V. O.	Fayetteville
†Lewis, James F.	Corpus Christi, Tex.
*Miller, R. W.	Fayetteville
Mock, W. H.	Prairie Grove
Paddock, C. S.	Fayetteville
*†Richardson, Fount	U. S. A.
*Sisco, C. P.	Springdale
*†Sisco, Friedman	Camp Bowie, Tex.

WHITE COUNTY

Abington, E. H.	Beebe
Abington, W. H.	Beebe
Adair, T. L.	Bald Knob
Allbright, S. J.	Searcy
Burton, G. C.	Bald Knob
Dunklin, A. J.	Searcy
Felts, W. R.	Judsonia
†Hardy, F. P.	Searcy
Hassell, A. B.	Rose Bud
Hawkins, M. C., Jr.	Searcy
Hudgins, A. H.	Jonesboro
†Moble, Hugh	San Luis Obispo, Calif.
Peeler, C. M.	Pangburn
Rodgers, P. R.	Searcy
Ruff, John L.	Searcy
Sloan, D. W.	Beebe
Sloan, J. R.	Garner
†Sneed, J. W.	Searcy
Spain, A. L.	Letona

WOODRUFF COUNTY

Brewer, E. F.	Augusta
Dungan, C. E.	Augusta
Evans, R. H.	Chaffield
Hays, J. F.	Augusta
Maguire, F. C., Sr.	Augusta
McAdams, J. C.	McClelland
Morris, J. W.	McCrory
Murphy, Frank	Lexa
Wilkins, W. T.	Cotton Plant
Williams, W. J. B.	Cotton Plant

FIGURES ON TUBERCULOSIS

	New Cases		Deaths		Rate per 100,000 Population		
UNITED STATES	105,714		59,173		44.4		
ARKANSAS							
		White	Negro	Total			
Deaths, all forms	1941	548	417	965			
Deaths, all forms	1940	533	466	999			
Rate per 100,000 population	1941	38.2	81.0	49.5			
Rate per 100,000 population	1940	37.1	90.5	51.2			
Estimated cases on basis of 1941 deaths					8,685		
Actual number of new cases reported					1,051		
County	Total Deaths 1940	Total Deaths 1941	White	Negro	1940 Population	Rate per. 100,000 Population	No. New Cases Reported 1941
Arkansas	9	8	3	5	24,437	32.7	26
Ashley	6	10	3	7	26,785	37.3	20
Baxter	6	5	5	---	10,281	48.6	17
Benton	14	11	11	---	36,148	30.4	10
Boone	4	3	3	---	15,860	18.8	2
Bradley	6	5	2	3	18,097	27.6	10
Calhoun	2	2	2	---	9,636	20.6	5
Carroll	8	3	3	---	14,737	20.3	1
Chicot	7	5	1	4	27,452	18.1	37
Clark	8	6	2	4	24,402	24.5	24
Clay	11	8	8	---	28,386	28.1	10
Cleburne	3	1	1	---	13,134	7.6	8
Cleveland	1	3	---	3	12,570	23.8	0
Columbia	8	11	4	7	29,822	36.9	1
Conway	17	7	1	6	21,536	32.5	19
Craighead	27	19	18	1	47,200	40.2	23
Crawford	4	8	7	1	23,920	33.4	6
Crittenden	35	25	1	24	42,473	58.8	39
Cross	12	11	4	7	26,046	42.2	8
Dallas	9	2	1	1	14,471	13.8	9
Desha	14	9	4	5	27,160	33.1	14
Drew	10	9	3	6	19,831	45.3	1
Faulkner	10	6	6	---	25,880	23.1	14
Franklin	3	3	3	---	15,683	19.1	16
Fulton	7	7	7	---	10,253	68.2	13
Garland	19	20	15	5	41,664	48.0	36
Grant	2	3	3	---	10,477	28.6	2
Greene	6	17	17	---	30,204	56.2	1
Hempstead	20	20	5	15	32,770	61.0	0
Hot Spring	6	4	3	1	18,916	21.1	0
Howard	3	8	3	5	16,621	48.1	6
Independence	8	10	10	---	25,643	39.0	26
Izard	3	7	7	---	12,834	54.5	1
Jackson	11	8	7	1	26,427	30.2	11
Jefferson	26	39	13	26	65,101	59.9	11
Johnson	7	4	4	---	18,795	21.2	1
Lafayette	11	7	1	6	16,851	41.5	5
Lawrence	5	3	3	---	22,651	13.2	2
Lee	14	16	3	13	26,810	59.6	21
Lincoln	11	7	2	5	19,709	35.5	4
Little River	6	6	4	2	15,932	37.6	0
Logan*	45	85	85	---	25,967	327.3	17
Lonoke	9	10	5	7	29,802	33.5	10
Madison	5	2	2	---	14,531	13.8	1
Marion	5	3	3	---	9,464	31.7	5
Miller	18	13	7	6	31,874	40.7	15
Mississippi	53	27	13	14	80,217	33.6	94
Monroe	11	10	4	6	21,133	47.3	13
Montgomery	2	2	2	---	8,876	22.5	9
Nevada	5	8	3	5	19,869	40.2	3
Newton	1	1	1	---	10,881	9.1	6
Ouachita	12	14	4	10	31,151	44.9	8
Perry	8	3	3	---	8,392	35.7	5
Phillips	40	36	6	30	45,970	78.3	7
Pike	3	4	1	3	11,786	33.9	3
Poinsett	16	17	13	4	37,670	45.1	1
Polk	6	5	5	---	15,832	31.6	0
Pope	8	9	6	3	25,682	35.0	20
Prairie	2	2	1	1	15,304	13.0	9
Pulaski	128	120	53	67	156,085	76.8	212
Randolph	9	7	7	---	18,319	38.2	6
St. Francis	25	21	4	17	36,043	58.2	7
Saline**	81	103	36	67	19,163	537.4	1
Scott	5	2	2	---	13,300	15.0	6
Searcy	3	2	2	---	11,942	16.7	5
Sebastian	34	24	24	---	62,809	38.2	16
Sevier	---	6	6	---	15,248	39.3	1
Sharp	2	4	4	---	11,497	34.8	2
Stone	3	1	1	---	8,603	11.6	4
Union	17	18	11	7	50,461	35.6	4
Van Buren	6	7	7	---	12,518	55.9	7
Washington	11	11	10	1	41,114	26.7	7
White	15	9	8	1	37,176	24.2	48
Woodruff	10	9	5	4	22,133	40.6	7
Yell	2	4	3	1	20,970	19.0	32

* includes State Tuberculosis Sanatorium for whites.
** 34 white deaths at the Benton Unit of the State Hospital and 65 Negro deaths at McRae Sanatorium.
NOTE: These figures compiled by the Arkansas Tuberculosis Association from the records of the State Health Department.

The President's Page

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"OUR STATE SANATORIUM"

The Arkansas Tuberculosis Sanatorium is a 1,200-bed institution located three and one-half miles south of Booneville, Arkansas. It is in the pine-clad foothills of the Ouachita mountains at an elevation of about 1,055 feet. A branch of the hospital, known as Wildcat Mountain Branch, which accommodates 100 patients, is located four miles east of Fort Smith.

Established in 1909, the growth of the institution was comparatively slow until the recently completed building and expansion program, which involved an expenditure of approximately \$2,500,000, was begun. From a modest beginning as a 64-bed hospital, it has been so enlarged and improved that now it is recognized as being the largest state institution of its kind in the United States. Every kind of building, equipment, and service facility for the scientific treatment of tuberculosis in its varying forms, including surgery, is incorporated in the plant. The sanatorium operates its own bakery, laundry, ice and power plants. It has its own postoffice. And, to an appreciable degree, it is self-supporting, for it maintains its own dairy herd of Holstein breed, and operates a 3,000-acre farm. Three miles of hard-surface road is being completed within the grounds, and a landscaping project is being worked out. It is a small city within itself, devoted to its one purpose for being—the prevention and treatment of tuberculosis. In this field, it has achieved an outstanding record.

The staff of this institution is most capably headed by Dr. J. D. Riley, who is assisted by an assistant to the superintendent, a pathologist, a surgeon, ten resident physicians, a consulting dentist, a steward and a superintendent of nurses. These are supported by a large corps of registered nurses, practical nurses and other employees. The per capita cost for the last biennium was \$1.59.

The doctors of Arkansas as well as the citizenship of the State have every reason to be extremely proud of this institution.

R. B. ROBINS, M. D., President.

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EDITORIALS

DISLOCATION FROM CIVILIAN PRACTICE

Misunderstanding exists among the physicians in Arkansas over efforts of the Procurement and Assignment Service to determine which physicians will consent to dislocation from their present civilian practice to accept civilian or industrial assignment for the duration. Only those physicians who signified on their Procurement and Assignment enrollment form, as their first or second choice for service during the war emergency to so dislocate themselves, have received inquiries. It is appreciated that failure to fully understand the enrollment form or a change in the civilian practice of their communities will necessitate revocation of such a previously announced choice. However, it is the function of the state procurement and assignment agency to compile a list of physicians who are willing to make these change of locations in order that interested communities and industries may be informed where to seek a physician. There is no disposition upon the part of the Federal authorities to forcibly move a physician

from one civilian capacity to another. There does exist a need for physicians in some communities as well as in industries, and physicians who desire to make a change of location in order to further the war effort are urged to notify the state procurement and assignment chairman.

DOCTORS AND RATIONING

The medical profession is now called upon again to demonstrate integrity and patriotism in the acceptance of the tire and gasoline rationing program. The authorities have wisely provided that physicians may make use of their automobiles in the necessities of their practice, making possible the provision of an essential service to the people of the United States which can frequently only be supplied by the use of the automobile.

Unless the profession as a body accepts the confidence placed in it, much serious and justified criticism may result. There can be no place in the rationing program for the selfish or thoughtless physician. It becomes our obligation to fulfill to the letter the restrictions imposed upon our use of motor transportation. In no other manner can we merit the continued confidence of the public.

EDITORIAL COMMENT

CHANGE OF ADDRESS BY MEMBERS IN ARMED FORCES

The Society desires that each member, now on duty with the military forces, receive The Journal regularly. Every effort will be made to place The Journal in the hands of each member now in service, each month, and regardless of his station. However, The Journal must have the full cooperation of our members in the services if this promise is to be fulfilled. It is, therefore, requested that members accept the responsibility of furnishing The Journal with changes of assignment as they are made, giving full military address in accordance with army and navy censorship regulations. Because of censorship regulations, those copies of The Journal for members stationed overseas, can only be mailed to army or navy postoffice addresses. Your cooperation will help us to send each month your copy of The Journal.

PROCEEDINGS OF SOCIETIES

The Benton County Medical Society met in dinner session at Rogers October 8th for the following program: "Compound Fractures," S. J. Wolfermann, Fort Smith, and "Practical Feeding of Infants," Capt. A. Tow, Camp Chaffee.

M. W. Chastain, Secretary.

The First Councilor District Medical Society met in dinner session at Jonesboro October 8th for the following program: "Histamine in the Specific Type Headache and Meniere's Disease," Jos. Verser, Harrisburg; "Carcinoma of the Prostate," I. G. Duncan, Memphis; "Industrial Surgery," Jos. F. Shuffield, Little Rock, and "Selective Service Medical Problems," Cmdr. H. A. Higgins, Little Rock. W. C. Overstreet, Jonesboro, was elected president, and Earle D. McKelvey, Paragould, was elected vice-president. The Society will next meet in Jonesboro.

J. H. McCurry, Secretary.

The 1943 annual session of the American Medical Association, to have been held in San Francisco, has been cancelled by the Board of Trustees. There will be held an official meeting of the House of Delegates of the American Medical Association in Chicago, time to be later announced.

The Tenth Councilor District Medical Society met in Fort Smith September 24th for the following program: "Traumatic Chest Surgery," Maj. Warner F. Bowers; "Traumatic Abdominal Surgery," Maj. Farris D. Evans; "Management of Compound Fractures," Capt. David I. Schwartz, and "Nature and Treatment of Shock," Lt. Norman F. Richard, all speakers of Camp Chaffee. The following officers were elected: C. S. Wilson, Siloam Springs, President; A. B. Dickey, State Sanatorium, Vice-President, and Chas. T. Chamberlain, Fort Smith, Secretary. The Society will next meet in Fort Smith.

A. B. Dickey, Secretary.

The Sebastian County Medical Society was addressed October 13th by I. F. Jones, Fort Smith, on "Preoperative and Postoperative Therapy."

W. F. Adams, Secretary.

The Second Councilor District Medical Society met in dinner session at Batesville October 12th for the following program: "Regimented Medicine," H. E. Mobley, Morrilton, and "Med-

ical Aspects of Selective Service," Comdr. H. A. Higgins, Little Rock. The following officers were elected: President, C. G. Hinkle, Batesville; Vice-president, V. D. McAdams, Cord, and Secretary, O. J. T. Johnston, Batesville.

O. J. T. Johnston, Secretary.

The Fifth Councilor District Medical Society met in dinner session at Camden October 13th for the following program: "Medical Problems of Selective Service," Comdr. H. A. Higgins, Little Rock, and "Obstetric and Pediatric Care for Wives and Infants of Enlisted Men," W. B. Grayson, Little Rock. A motion picture on adrenal cortical hormone was presented.

MEDICAL OFFICERS NEEDED—TENNESSEE VALLEY AUTHORITY

The Tennessee Valley Authority is in urgent need of medical officers who are not eligible for military service and who are willing to accept assignments to war industrial activities (construction, manufacture of war chemicals, and manufacture of hydro-electric power) as their participation in the all-out war effort. Responsibilities include physical examinations, industrial hygiene, care of injuries, medical care to families in remote construction areas, and general public health responsibilities in construction camps and villages. Salary ranges from \$3,200 to \$4,200 per annum with opportunity for promotion. For further information write to Dr. E. L. Bishop, Director of Health, Tennessee Valley Authority, Chattanooga, Tennessee, or to the Personnel Department, Tennessee Valley Authority, Knoxville, Tennessee.

AGAR AND THE WAR

The war has cut off importations of agar-agar, which normally come from Japan. The War Production Board has frozen all stocks of agar in order to protect the requirements for bacteriologic culture medium use of the Army, Navy and civilian hospitals and laboratories.

This W.P.B. control of agar stocks made it necessary for Mead Johnson & Company to discontinue the manufacture of "Pectin-Agar in Dextric-Maltose," a product which has been used by the medical profession for the treatment of diarrhea in infants.

Fortunately, Mead Johnson & Company have another product, Casec, which gives good results for the same purpose. Physicians who are not familiar with Casec are invited to write for samples and descriptive literature to Mead Johnson & Company, Evansville, Indiana.

PERSONALS AND NEWS ITEMS

J. M. Walls, Blytheville, has been appointed Captain, Medical Corps, Army of the United States, and assigned to Headquarters, 12th Hospital Center, Camp Gruber, Oklahoma.

R. B. Robins, Camden, attended the Fall Clinical Conference at Kansas City in October.

J. F. Lewis, Fayetteville, has been appointed Lieutenant (j. g.), Medical Corps, U. S. N. R., and assigned to Naval Hospital, Corpus Christi, Texas.

MARRIED—At Saint Louis, October 1st, J. C. Faris, Jonesboro, and Miss Hildegard Bliss, Saint Louis.

J. W. Lamb, Paragould, has been appointed Lieutenant, Medical Corps, Army of the United States, and assigned to the Air Base, Salt Lake City, Utah.

A. C. Shipp, Little Rock, recently addressed the student body of Henderson State Teachers College, Arkadelphia, on tuberculosis.

J. W. Branch, Camp Chaffee, has been promoted to Major.

Lt. Cmdr. J. W. Amis, Fort Smith, is now stationed in the Pacific.

Capt. Jerome S. Levy has been transferred from Wm. Beaumont General Hospital, El Paso, to Bushnell General Hospital, Brigham City, Utah, where he is assigned as chief of gastroenterological section.

Harry E. Murry, Texarkana, recently took courses in traumatic surgery and fractures at Cook County Hospital, Chicago.

C. A. Archer, Jr., Prescott, has moved to Dumas, Texas, where he is associated with the Cactus Ordnance Works.

Joe F. Rushton has been elected a director of the **Citizens Bank**.

MARRIED—On August 28th, Lt. J. B. Wharton, Jr., Naval Station, Corpus Christi, Texas, and Mrs. Iola Holt Pendleton, Shreveport, Louisiana.

Ruth Brittain Pickett and husband, B. E. Pickett, of Carrizo Springs, Texas, have located in Conway.

J. O. Rush, Forrest City, attended the recent Kansas City Fall Clinical Conference.

BORN—On August 18th, a daughter, to Major and Mrs. Euclid M. Smith, Hot Springs National Park.

Luther Davis, formerly of Chatfield, has been appointed health director at Walnut Ridge.

Speakers before the Southern Tuberculosis Conference at Memphis, October 5th-7th, were A. B. Dickey, State Sanatorium, "Prophylaxis and Treatment of Empyema"; A. C. Shipp, Little Rock, "Presidential Address," and J. D. Riley, State Sanatorium, "Interpretation of Shadows in X-ray Film."

Major A. DeGroat, formerly of Little Rock, is now located at the Station Hospital, Fort Custer, Michigan.

A. C. Kolb recently addressed the Little Rock Civitan Club on the State Hospital.

M. V. Russell, El Dorado, has been elected a Fellow of the American Academy of Ophthalmology and Otolaryngology.

"Treatment of Burns" by Capt. Ellery C. Gay, M. C., U. S. A., appeared in the September issue of The Military Surgeon. Capt. Gay is now stationed with 2nd Surgical Hospital Group (Aux.); Lawson General Hospital, Atlanta, Ga.

E. C. Moulton, Fort Smith, attended the recent session of the American Academy of Ophthalmology in Chicago.

J. M. Kolb, Clarksville, has been called to active duty as Captain, Medical Corps, and assigned to Fort Sam Houston, Texas.

R. B. Robins, Camden; W. B. Grayson, Little Rock, and J. D. Riley, State Sanatorium, have been appointed vice-presidents for the annual seal sale of the Arkansas Tuberculosis Association.

F. Q. Wyatt, Batesville, has been called to active duty as Captain, Medical Corps, Army of the United States, and assigned to March Field, Riverside, California.

Paul L. Mahoney, Little Rock, attended the recent session of the American Academy of Otolaryngology in Chicago.

M. W. Chastain, Bentonville, has been called to active duty as Lieutenant, Medical Corps, Army of the United States and assigned to Aviation Cadet Training Center, San Antonio, Texas.

L. L. Hassell, Blytheville, has been called to active duty as Lieutenant, Medical Reserve Corps, United States Army, and assigned to Fort Sam Houston, Texas.

S. J. Wolfermann addressed the Fort Smith Rotary Club October 21st on "Medicine in War-time."

RANDOM THOUGHTS OF THE SECRETARY

September 24th. The Tenth Councilor meets with the State Sanatorium staff carrying off the attendance prize. We wonder how Arnold and Nowlin feel being on call for 1,200 patients this day. The army steps in and presents a good program and we are glad to report the advancement of Dickey from secretary to vice-president and will leave to him any comment as to his deserving the promotion.

September 30th. The best half returns this morning assuming more than a half of the responsibility for the comings and goings of the youngster to our great relief.

October 1st. Engaged in telephonic conference this night with Bob Robins, Clyde McNeil, Sam Thompson and Grayson, having much free conversation with Bob and Clyde while the operators seek Sam and Grayson.

October 4th. The guests of Major Stanley M. Gates, the family takes "pot luck" with the Camp Chaffee Station Hospital mess and finds it all to our liking. The comments on the personnel, entirely humorous but with the human understanding that Gates possesses in great degree, remind us throughout the visit of days with the 206th.

October 6th. Present for the Kansas City Fall Clinical Conference, the proud sire of this popular type of meet-

ing, imitated, yet still keeping ahead of the procession. President Robins on hand, making new acquaintances in both the Drum Room and in the meeting halls, yet a bit unkind to colleague Virden, who owns a farm in Desha county, by telling him that the Jap colony surrounds his farm on three sides. We take in the fracture refresher course, interesting indeed, and hear Louie Allen, the radiologist, tell the orthopedists the how and why and wonder why some one did not do all this long ago. At Lockwood's dinner there is a gathering of radiologists with no thought of the perplexities of the life we lead nor of our constant harassment by colleagues but only congeniality and we depart happier about the whole thing as is our invariable custom after visiting with the Kansas City profession.

October 8th. We view the Ozarks in all their early fall beauty this afternoon with lingering looks and observe that U. S. 71 is already on a gas-rationed travel basis. Arriving Rogers well ahead we seat ourselves with Wolfermann and Captain Tow on the hotel porch and engage in general conversation, adding Greene and McNeil to the circle as they, too, put in early appearance. The Benton County Medical Society has its usual good dinner at the Harris Hotel but this time we pass no complimentary phrases on the food, offering the suggestion to the hotel management that they further study the matter of distribution of food to their guests. It will doubtless be of interest to some of our confreres to know that we failed to eat this night at a medical society banquet. This aside, a happy and instructive evening and home in good spirits, the inner man assisted by a White Castle hamburger in Fayetteville.

October 13th. By rail to Little Rock and we can tell the Ozark salvage committee that there is much scrap just behind the square along the railroad tracks. Met by Grayson in Little Rock who has not yet learned that a Pullman ticket in the hand is worth more than reservations for an entire car in the ticket office. In Camden announcing ourselves as an inspector from the Saint Louis office in Margaret Robins' Red Cross offices, we are temporarily disconcerted by the presence of a real inspector from Saint Louis. Enjoying our second fifth district meeting this year and its turkey dinner, making no mention of procurement and glad that we have had all the pleasures which go with a meeting in this district, we ride back at war speed encountering, as an unusual occurrence, a fox on the highway near Thornton, a short distance after Grayson had told his tale of seeing one two weeks ago. Joe Shuffield not being along, we continued our journey to the Toddle House and a bite to eat. Ultimately comes the Rock Island and we climb into our upper sleeping until just out of Booneville with full appreciation of the benefits of even four hours of slumber.

October 19th. At the staff meeting this night, master clinicians Wolfermann, Jones, Goldstein and Moulton content themselves with case reports in discussing the technician's paper of the purpuras. As for us, we take the heckling and remain quiet.

October 21st. Taking advantage of an opportunity which is available to many a physician, Wolfermann ably presents the case of medicine in wartime to the Rotarians today. We are convinced that the public is in a position to think right when facts are properly given for their consideration.

OBITUARY

OTTO RALPH HONOMICHL, age 56, died at his home in Hackett October 3rd after a long illness. Born in Kansas, he graduated from the Kansas City College of Medicine and Surgery in 1922 and had practiced at Hackett since graduation. He was a member of the Central Presbyterian Church of Fort Smith and of the Masonic Lodge at Hackett. Surviving relatives are his wife, three sons, his mother, and several brothers and sisters.

HARRY THOMAS HARR, age 73, died at his home in Fayetteville September 16th. Born in Fairmount, West Virginia, February 6, 1869, he graduated from the University of Maryland School of Medicine and College of Physicians and Surgeons in 1892 and located in Fayetteville as an eye, ear, nose and throat specialist in 1912. Mrs. Harr, the former Sarah Gallahue, to whom he was married on August 29, 1899, died in 1926. Surviving relatives are a son and five sisters.

ROBERT JOSEPH HALEY, SR., age 74 years, died at his home in Paragould September 14th of heart disease. Born in Crockett County, Tennessee, he had been a resident of Greene County for 58 years and had taught school in the county during his earlier years. Graduating from Memphis Hospital Medical College in 1899, he first practiced at Finch and later moved to Paragould. He was a past-President of the Greene County Medical Society and of the Dickson Memorial Hospital. For 30 years he had been president of the City Drug Company and was a former president of the Security Bank and Trust Company. He was a member of the Methodist Church. Surviving relatives are his wife, a daughter, and one son, Dr. R. J. Haley, Jr.

ESTES ALLEN, age 53, of Little Rock, died October 17th. A graduate of the University of Arkansas School of Medicine in 1930, he had practiced medicine in Little Rock subsequent to his graduation and had served as physician to the Arkansas Confederate Home. He served

during the World War. Surviving him are his wife, the former Miss Willie Ragon, of Little Rock, and a sister.

JAMES MONROE MATTHEWS, age 66, of Morrilton, died September 25th following an illness of about three weeks. Born in Romance, White county, January 17, 1876, he graduated from Memphis Hospital Medical College in 1910 and had practiced in Perry county prior to location in Morrilton in 1919. In addition to his membership in the Conway County Medical Society and the Arkansas Medical Society, he was a member of the Church of Christ, of the Masonic bodies and chairman of the board of directors of the Southern Christian Home in Morrilton. Miss Minerva Thedford, to whom he was married on December 24, 1902, survives him.

COMMUNIQUE

Ellington Field, Texas,
September 21, 1942.

To the Editor:

Outside of being away from home, my army service has been very pleasant. I am assigned to the largest air field in the Southeastern training center, and am chief of the medical service at the hospital, which is of five hundred bed capacity, with two hundred and fifty assigned to my service. The mission of our field is advanced training for heavy bomber pilots and the training of bombardiers and navigators. Part of my work is to help determine a man's fitness for flying, and I find it very, very interesting. I am not at liberty to tell the number in our training, but I can tell you that we are in full production and that the product that we are turning out is Grade A-1.

Please remember me to all the gang. With all good wishes and kind regards.

Sincerely,

Al (Euclid M. Smith).

WOMEN'S AUXILIARY NEWS

Touching briefly on amendments and a proposed initiated liquor act to be voted on at the November election, Mrs. Minnie U. Fuller, Magazine, Ark., addressed the Sebastian County Medical Society Auxiliary Monday at a luncheon meeting and afternoon program October 12th.

Mrs. Fuller long has been one of the prominent women leaders in the state in political and church circles.

Mrs. W. R. Brooksher, Jr., who recently attended a national conference of the Women's Field Army for the Control of Cancer, in New York City, reported on the army's program and discussed future educational campaigns and membership drives. Mrs. Brooksher is state commander of the Women's Field Army in Arkansas.

Fourteen members and two guests were present.

Mrs. J. L. Kellum, president, presided.

Woman's Auxiliary to the Bowie and Miller Medical Societies held its first fall meeting at the home of Mrs. S. W. Alston, 1804 Beech street, September 25th. Co-hostesses were Mrs. A. G. Lee, Mrs. C. E. Kitchens, Mrs. T. F. Kittrell, Mrs. M. A. Shrader and Mrs. Allan Collom.

Before the business meeting, Mrs. Julia Sanders conducted a class in Red Cross nutrition work, having as her subject, "Are Americans Well Fed?" Mrs. C. H. Frank conducted the business meeting during which the year-books were distributed. A white elephant sale for the benefit of the student loan fund was held. Thirteen subscriptions to Hygeia were donated to public schools of Miller and Bowie counties.

Mrs. Ralph Cross, fourth vice-president of the Texas Medical Auxiliary, reported on a recent board meeting held in Houston.

For refreshments, guests were invited to the dining room, where the table held a lovely arrangement of white chrysanthemums and white tapers in silver holders. Mrs. E. M. Watts and Mrs. C. H. Frank presided at the table.

The Auxiliary to the Ninth Councilor District Medical Society met at the Hotel Seville in Harrison, June 3rd, 1942, in a combined luncheon with the medical society.

At 2 P.M. the members assembled in the balcony with the President, Mrs. J. H. Fowler, in charge. Ten members answered roll call, and one new member, Mrs. E. A. Bing, of Marshall, was added.

Committee reports were heard and active interest was reported in First Aid Courses and Public Relation programs.

The Auxiliary had as guest speakers, Miss Jessie Faye Sorrels, Boone County Health Nurse and Mrs. W. A. Hudson, Detroit, Michigan, who gave an interesting review of her work as an instructor in first aid courses, nursing aid, and the USO.

Mrs. D. K. McCurry gave an interesting and inspirational talk in buying U. S. War Bonds and Stamps.

MRS. J. G. GLADDEN,

Sec'y Ninth Councilor District Auxiliary.

BOOK REVIEWS

The Mind and Its Disorders: By James N. Brawner, M. D., Medical Superintendent, Brawner's Sanitarium, Smyrna, Georgia. Walter W. Brown Publishing Company, 223 Courtland Street, N.E., Atlanta, Georgia, 1942. Price \$3.50.

In this book the author has made a conscientious effort toward writing an elementary explanation of the neuroses, psychoneuroses and psychoses. The book would be of considerable interest to anyone wanting a textbook covering only the essentials of these mental diseases. It makes no pretense of being comprehensive or inclusive.

Some of the more recent advances in treatment of these diseases in particular has been entirely ignored in this book but, perhaps, they are not of particular interest to the individual who would best be served by such a preliminary text.

Treatment in General Practice: By Harry Beckman, M. D., Professor of Pharmacology, Marquette University School of Medicine, Milwaukee, Wisconsin. Fourth Edition, Thoroughly Revised. 1,015 pages. Philadelphia and London: W. B. Saunders Company, 1942. Price \$10.00.

This useful volume appears in an enlarged fourth edition with the addition of new disease entities and revision of procedures in the treatment of others. The sulfonamides are clearly discussed. This is the last word in treatment, briefly presented, carefully prepared and a valuable book for any physician.

COMMUNIQUE

To the Editor:

Just a few lines to let you know that there is never a dull moment in the Army—Ha, Ha, and a couple of Hee's. I received the Journal last week, and believe you me, I appreciated it as never before, although, I might suggest that my professional card is sort of wasted just now.

There are four numbered station hospitals being activated here—that is, there were four—one of the left for P. O. E. (point of embarkation) a few days ago. They had not the remotest idea of where they were going—except that the motorized equipment had "sand tires" on them. And the more recent "Latrine-ograms" have it that two of the other units will go out together in a few weeks—which means farewell for yours truly.

There is a lot to be said about the army medical officer's life that would amuse you but you probably wouldn't believe it. So far, the most comforting things have been, (a) the fiber sun helmet, (b) all the cokes you want, by the case, 95c, (c) ditto, beer, \$1.55 per case. And believe it or not, I am enjoying the physical hardening-up we are getting; drill, hikes, gas-mask drills, etc., every day. Although, I must admit, the

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weight remains about the same—the exercise just creates an enormous appetite.

This station hospital assignment is ideal. I get half a day's work in a surgical ward as a glorified interne (except that we actually get some surgery to do) and the other half day is military work as described above, with plenty of lectures on tropical medicine thrown in. The 64th General Hospital is here, a 1,000-bed hospital unit, training here as we are. They are from Charity Hospital at New Orleans and their lecturers are excellent. Also, for example, the head of the Fort Jackson Station Hospital (2,000 beds) Orthopedic Section is Lt. Col. Cleveland, of New York City, one of the most outstanding orthopedic men in the United States.

Hope that the business of procurement has not landed you in the psychiatric ward as yet. I'll bet it resembles the biggest hangover you can remember!

Please excuse the typing. I am just renewing my acquaintance with one of the damn things.

With the very best regards, and hoping your children never have hangnails, I am,

Sincerely yours,

Monty.

Capt. John J. (alias "Monty") Monfort, M. C.,
107th Station Hospital,
Fort Jackson, S. C.

OKLAHOMA CITY CLINICAL SOCIETY

Information has come from the Surgeons General of the Army, Navy and Public Health Service in Washington, that strictly scientific professional meetings will contribute significantly to the war effort.

Older physicians who have been semi-retired are finding it necessary to increase their patient load. In order to do this, and in order to give their patients the proper kind of care, they are finding it necessary to brush up on the later developments and expanded fields of medicine.

The Oklahoma City Clinical Society Conference is the ideal place to do this. It is easily accessible to all physicians in the Southwest, and is in such concentrated form that a very thorough post graduate course can be obtained in the minimum of time.

While the meeting is primarily for the general practitioner, it also provides an opportunity for medical officers in service to meet and discuss their problems.

Emergency Medical Service for Civilian Defense, a subject of great importance to civilian physicians, will be discussed by Dr. Henry H. Ogilvie of San Antonio at the Clinic Dinner of Tuesday, October 27. Dr. Ogilvie is Regional Director of Emergency Medical Service for Civilian Defense, and is a brilliant speaker with a world of information at his finger tips.

The officers of the Oklahoma City Clinical Society have extended every effort to prepare a program that will be interesting and practical, and one which will be of essential value to preparations being made to adequately care for civilian and military needs during this emergency.



PHYSICIANS of the South have an urgent call to Richmond for the annual meeting of the Southern Medical Association, Tuesday, Wednesday and Thursday, November 10-11-12—a great wartime meeting. In the general clinical sessions, the twenty sections, the four independent medical societies meeting conjointly and the scientific and technical exhibits, every phase of medicine and surgery will be covered—the last word in modern, practical, scientific medicine and surgery. Addresses and papers will be given by distinguished physicians not only from the South but from other parts of the United States.

REGARDLESS of what any physician may be interested in, regardless of how general or how limited his interest, there will be at Richmond a program to challenge that interest and make it worth-while for him to attend.

ALL MEMBERS of State and County medical societies in the South are cordially invited to attend. And all members of state and county medical societies in the South should be and can be members of the Southern Medical Association. The annual dues of \$4.00 include the Southern Medical Journal, a journal valuable to physicians of the South, one that each should have on his reading table.

SOUTHERN MEDICAL ASSOCIATION

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"PHYTOBEZOAR": REPORT OF A CASE *

A. F. HOGE, M. D.
Fort Smith

Bezoars are no longer pathological curiosities. Nevertheless, they are of sufficient rarity, and, when they do occur, are of such clinical interest and importance as to justify the reporting of individual cases.

In 1938 DeBakey and Ochsner (1) published a comprehensive review of the literature with an analysis of 311 collected cases. They state: "In a thorough search of the world literature we have been able to collect 171 cases of trichobezoars, 119 cases of phytobezoars and 13 cases of other concretions. To these they added 1 case of trichobezoar and 7 cases of phytobezoars. Of the 126 cases of phytobezoars, 23 had associated gastric ulcer. To this collected list I wish to add a report of a case of phytobezoar associated with gastric ulcer.

Definition: The term "bezoar" is said to be derived from the Persian "pad zahr," or the Arabian "bad zahr," and signifies a counter poison, or antidote. The term was applied to concretions or masses found in the stomachs or intestines of animals and man. The oriental bezoar stones of the ancients were highly prized and of great value. They were worn as charms or amulets and enjoyed a great vogue in medieval medicine. Bezoars are classified according to their composition, e.g. trichobezoar (pilobezoar) or hair ball; phytobezoar (hortobezoar) concretions; and the mixed or tricho-phytobezoar.

Trichobezoars or hair balls are, as the name implies, masses of hair matted or felted together forming, at times, enormous masses filling the stomach and, at times, extending through the stomach into the duodenum. Speculation as to how and why these masses are formed is intriguing. Balfour (2) says: "Young women otherwise sound in mind and body, occasionally be-

come addicted to the habit of chewing and biting off the ends of their hair and trichobezoars are formed." Maes (3) questions this saying: "* * * but with the advent of universally bobbed heads such an explanation is no longer tenable, and it will be interesting to observe whether the incidence of trichobezoars will be lessened in this generation. He feels that "some psychic or neurologic factor is unquestionably at work in such cases * * *."

Concretions reported have been, in most cases, composed of shellac ingested as a beverage by painters, furniture workers, etc., as an alcoholic solution because of the alcoholic content. The shellac precipitates out and forms a mass. Isolated concretions composed of bismuth carbonate, salol, etc., have been reported.

Phytobezoars are masses of vegetable matter or fruit and have been found to be made up of persimmon, prune pulp, raisin seeds and skins, pumpkin or celery and salsify fibres together with fats, fatty acids, food particles, muscle fibres, epithelium, salts incorporated in the mass. Of these, the persimmon bezoar is the most frequent, accounting for 92 of the 126 collected cases of phytobezoar.

DeBakey and Ochsner (1) state that, "because of this fact and because of its distinctive clinical character, it is considered desirable to separate it from other phytobezoars by a more significant term." They suggest the term "dios pryobezoar" from the Greek etymon, Diospyron (meaning Joves grain) which is the generic term for the wild persimmon.

Etiology: The formation of phytobezoars has been attributed to various mechanisms or factors.

Mechanisms: Most of the patients report eating rather large amounts of the fruit on an empty stomach. Vigorous peristalsis under these circumstances has been thought to mold the pulp into a compact mass. Gastric acidity has been an aid in causing cohesion. Allen (4) states that although the persimmon seed may form a part of the mass its necessity as a nucleus does

* Read before the Sixty-seventh Annual Session of the Arkansas Medical Society, Hot Springs National Park, April 28, 1942.

not appear to be essential. He further states that "The gum and jelly constituents, together with the small cellulose content, are sufficient, it appears for the molding of an insoluble mass in the stomach, and it is generally agreed that it is formed soon after ingestion." All writers on the subject are agreed that the mass, once formed, remains without additions or accretions. Izumi is quoted as attributing the "astringency of unripe persimmons to the presence of soluble shibuol, a phlobatannin composed of phloroglucin and gallic acid. As the fruit ripens, the shibuol coagulates becoming insoluble and no longer astringent. However, even in the ripe fruit traces of soluble shibuol can be detected. Dilute mineral acids coagulate shibuol and Izumi states that the gastric juice is capable of precipitating soluble shibuols and they (Izumi and his co-workers) were able to produce artificial persimmon balls by incubating small pieces of the fruit in gastric juice. It is probable that the presence of other food in the stomach at the time of ingestion of the persimmons keeps the latter from forming into a mass.

Symptomatology: In the case of trichobezoars the symptoms may come on gradually over a period of years and are quite variable, depending upon the size of the mass, the condition of the stomach, etc. In contrast, when phytobezoars are formed the onset of symptoms usually occurs promptly.

There may be palpable mass. This was observed in 54 of the 94 cases collected by DeBakey and Ochsner. Pain and tenderness was present in 80; nausea and vomiting in 70; weakness and loss of weight in 31; constipation and diarrhea in 30; hematemesis in 14 and history of ingestion in 62 of these collected 94 cases. Thus we see that the most common presenting symptoms were pain, tenderness, nausea and vomiting. These were in turn followed by loss of weight and weakness. There is usually moderate anemia.

Diagnosis: The diagnosis is based upon the history, the physical examination and the X-ray findings.

In the history, we may have the history of ingestion of the persimmons followed in a short time, that is, from a few days to a few weeks, by the symptoms enumerated. There is pain, tenderness, nausea, vomiting, loss of weight, alternating diarrhea and constipation, weakness. In a few instances there has been hematemesis.

The following is the differential table presented by Hart:

A. Trichobezoar:

1. Female, with long hair; may get history of hair chewing or swallowing.
2. May crepitate.
3. Hair sometimes vomited, or may be found in the stools.
4. Hair may be found following gastric lavage.
5. Gradual formation.

B. Phytobezoar:

1. Tumor extremely mobile.
2. Males more common.
3. Does not crepitate.
4. Acute gastro-intestinal attack.
5. Rapid formation.
6. History of ingestion of certain fruits or vegetables.
7. May be canalization of barium in hair-ball and bezoar.
8. Hyperacidity common; may be complicated with ulcer.

C. Carcinoma:

1. Filling defect constant.
2. Hypo-acidity common.
3. Tumor not so freely movable.
4. Emaciation of variable extent.
5. Age.
6. Pain usually on palpation or pressure.

D. Other Tumors of the Stomach:

1. These show constant defects.
2. Nonmobile.
3. Do not disappear and reappear.

E. Polyps with long pedicle:

1. May get dimpling at point of attachment of pedicle.

Physical examination is not significant unless a mass is palpable.

The X-ray findings are characteristic and conclusive. When barium is administered there may be a hesitancy as it enters the stomach. The barium meal will then be observed to pass around a mass of lesser density or translucency much like a rivulet of water going around a rock. As the barium leaves the stomach a thin film of the barium will adhere to and surround the mass. The mass is movable within the stomach and moving the mass does not produce dimpling of the wall.

The laboratory findings are inconstant. Varying degrees of anemia may be observed. The leucocyte count is variable and ranges from normal to moderate leucocytosis. Gastric analysis reveals normal to increased acidity.

Treatment: Treatment is essentially surgical. While a few cases have been reported in which the masses have been broken up by massage and later portions of the bezoar have been recovered from the stools this seems a rather unsafe and hazardous procedure. It would be especially hazardous if there were a concomitant ulcer which might perhaps be unrecognized. It has been suggested that there might be developed a solvent which could be used without detriment to the tissues. Thus far no such solvent has been found.

Case Report: January 20, 1942. J. B. McCurtain, Oklahoma. Age 61. Formerly a coal miner and farmer. Now retired. Patient states that he has not been able to do anything much for the past five or six years; that he cannot work for more than 2-3 hours at a time because of hurting in his legs and arms.

Present Complaint: In November, he began to have a burning, hurting in the epigastrium. Until the present time he has been taking various things recommended by druggists. The hurting in the epigastrium continues. He feels that gas forms in his stomach causing "a sour bloat," and the feeling of gas pressure is not relieved until he takes a "quick purgative." He says that, after eating, the food doesn't "sour on his stomach" for about five hours; then he has to take a purgative. After the purgative, and the gas has been eliminated, he gets relief but the hurting in the epigastrium continues. The hurting is worse in the recumbent position. In the recumbent position he feels that the gas pressure makes his heart flutter. This sensation has been present for the past ten weeks. He states that all of his life he has spit up some food after eating. Sometimes there is nausea but he has not vomited. For the past several days he has eaten hardly anything at all. No blood has been observed in the stools.

Past History: Pneumonia fourteen years ago. Influenza in 1918. Prior to the onset of the present illness he ate everything he liked without any pain, but had the habit of belching and spitting up some food after meals.

Family History: Not significant.

Social Habits: He drank somewhat excessively in his younger days but has not used alcoholics for the past twenty-two years. He denies syphilis.

Physical Examination: Patient is midget type, well developed, good color. Blood pressure, 126 systolic, 84 diastolic; weight 99 lbs. Head: Pupils are equal and react; incipient cataracts are present. There is moderate arcus senilis. Teeth are in poor repair, largely worn down or broken off; others have pus around gum margins. Oral hygiene is very poor. Neck: Negative for glandular masses; thyroid is not enlarged. Chest: Symmetrical, percussion resonance normal throughout. Heart: Normal size, position, sounds and rhythm. Abdomen: Flat, soft, no masses are palpable.

Laboratory:

Gastric Analysis: Free hydrochloric acid 25; total acidity 78; no lactic acid; occult blood positive.

Urinalysis: Yellow; clear; Ph 5.5; specific gravity 1.002; no albumin; no sugar; no casts.

Blood Examination: Hemoglobin 87%; erythrocytes, 5,290,000; leucocytes, 11,600; eosinophiles 2%; stabs, 2%; polynuclears, 57%; lymphocytes, 35%; monocytes, 4%. The Kahn is negative.

X-Ray Findings: (Dr. W. R. Brooksher) "The opaque meal entered the stomach in a normal manner. An area of decreased density with rather sharp borders was noted in the cardia and pars media. This was found to move freely within the stomach cavity and exhibited striations of the opaque substance as are found associated with food residues. The impression is of a bezoar."

Operation: January 24, 1942, under Pontocaine, glucose, intra-spinal anesthesia.

Procedure: Upper left rectus incision. Pyloric end of the stomach examined and found normal. Stomach brought forward and mass presented in the cardiac end of the stomach. A longitudinal incision was made in the anterior wall of the stomach and a mass delivered which measured roughly six inches in length by three inches in diameter. The mass was hard, brownish black in color, rough, with seeds protruding out of or matted in the surface. After removal of the mass, the stomach was examined and an ulcer was found in the lesser curvature about the mid portion of the stomach. The ulcer was about two cm. in diameter and had a rather deep, punched out appearance with hard, firm edges. In view of the history, it was considered probable that the ulcer antedated the bezoar and that it might possibly be malignant. Resection was deemed advisable and was done, about two-thirds of the stomach being removed. The Hofmeister ante-colic method of anastomosis was performed. Immediate post-operative condition was good and convalescence was uneventful. The patient was discharged from the hospital on the eighteenth day. A letter received from this man a few days ago advised me that he is feeling fine, eating well and has no symptoms of any kind.

SUMMARY

1. A case of phytobezoar with associated gastric ulcer is reported.
2. In view of the fact that this state is in the persimmon belt, it would be well for us to keep this condition in mind and be on the alert for recognition of such cases.
3. In view of the mode of formation, it perhaps would be worthwhile for us to caution our friends and patients to refrain from eating persimmons when the stomach is empty.

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CHIEF OF GASOLINE RATIONING APPEALS TO PHYSICIANS OF U. S.

An open letter to all physicians of the United States from the chief of the Gasoline Rationing Branch, Office of Price Administration, concerning the vital role they will play in the rationing of gasoline and tires, is published in the Medicine and the War section of The Journal of the American Medical Association for October 31. The letter is as follows:

"In the East Coast Gasoline Rationing program, made necessary by the shortage of transportation facilities for petroleum products, the indispensability of your profession was recognized by its inclusion in the categories of persons eligible for preferred mileage, that is, necessary occupational mileage in excess of 470 miles a month. Now the Office of Price Administration has been ordered by Mr. William Jeffers to institute and administer a nation-wide mileage rationing program for the express purpose of conserving our rubber-borne transportation. In framing the Regulations for the new program, your profession was one of the first to be provided for.

"If we are to carry out our double task of preventing a collapse of our military and civilian transportation, we must have the complete cooperation of those groups of persons whose driving is deemed essential to the war effort. Our immediate aim is to attain the 5,000-mile national mileage average set by the Baruch Report as the maximum possible in light of the dire rubber shortage. Our experience with the East Coast program tells us that the preferred categories use one half of the gasoline consumed, though they constitute less than one-fourth of the total number of automobile operators. Clearly, then, the great savings of rubber on a nation-wide scale must be made in the preferred categories.

"Under the Regulations, governing the mileage rationing program, physicians are eligible for preferred mileage if their essential occupational needs exceed 470 miles a month and if the mileage is needed for regularly rendering necessary professional services. Mileage traveled daily or periodically between home or lodging and a fixed place of work is not considered preferred. Physicians who conduct their practices in offices, as many specialists do, are not eligible for preferred mileage.

"Without question or hesitation doctors have been and will be granted all the gasoline needed to carry out their professional work. We hope that they will regard their concrete symbol of their indispensability, the C book, as a moral obligation and not as a personal privilege. From another point of view, the C book is part of a doctor's equipment; it should not be used for anything but the work of humanity.

"When nation-wide gasoline rationing begins, there are certain concrete things a doctor can do to live up to the high ethical standards set for him by his own profession:

"1. At the time of first issuance of rations, he can so carefully compute his necessary mileage as to make a B book adequate for his purposes though he might easily make out a case for a C book, which might be granted to him without question by his local War Price and Rationing Board eager to provide for physicians.

"2. In the computation of his mileage, he can religiously adhere to the provision of the Regulations, which makes 150 miles of his basic ration available for occupational purposes. Moreover, he can help mightily in establishing the principles that only 90 miles of the basic ration are to be used for home necessary use and that there is no provision whatever in any ration for 'pleasure driving.'

"3. Conversely, if he should be granted a C book, he can return to the local board, at the end of the three months period, all unused coupons accruing to him as a result of a quite natural overestimation of needs or of overgenerous 'tailoring' by his board, instead of using such coupons for nonessential purposes. The moral effect of such an act on his fellow-citizens will be incalculable.

"4. He can set an example by scrupulously observing the 35-mile speed limit, except in cases of emergency, in spite of the fact that doctors could easily 'get away with it.'

"5. Should he be assigned to a hospital, clinic or institution after a ration card for calling on his private practice has been issued, he can use public means of transportation at the price of personal inconvenience.

"6. He can refrain from any kind of driving whatever which might appear to be nonessential in the eyes of the public.

"Doctors are the leaders and molders of public opinion in their communities. If the average man has any reason to believe that the profes-

sional men whom he regards with great respect are indifferent or hostile to the mileage rationing program, it will be difficult, if not impossible, to make it effective. Conversely, if doctors as a group observe the letter and spirit of the Regulations, they will be a powerful force in making this absolutely mandatory war measure serve its purpose. We know that we can rely on the support of your profession, which has demonstrated its patriotism, ability and unselfishness at every opportunity.

"John R. Richards,
"Chief Gasoline Rationing Branch,
Office of Price Administration."

Commenting on Mr. Richards' letter, The Journal says that "It calls on the medical profession not only to comply fully with the actual stipulations relative to the rationing of gasoline and tires but also to go beyond such limitations into the spirit of the effort which is so intimately concerned with the winning of the war. Doctors should adhere religiously to the provisions of the regulations and should set an example to all other persons in the community by the economy with which they use these materials. When Mr. John R. Richards say that doctors are the leaders and molders of public opinion in their communities, he recognizes the dependence of the public on medical leadership in all matters concerned with health. Already such recognition has come from the director of the Fuel Rationing Division. Physicians are authorized to certify invalids, old people and infants for extra fuel oil. Mr. Joel Dean, director of this division, points out that the rationing boards will naturally rely largely on physicians' certification. He says 'If these auxiliary rations are granted with unjustified liberality, the effectiveness of the entire effort to distribute this scarce commodity equitably and to assure continuance of oil for industrial processes in war plants will be jeopardized. I am sure that the medical profession, when it realizes the seriousness of this additional responsibility, will discharge it conscientiously and patriotically.' The patriotism of the medical profession has never been questioned. In this great war physicians have demonstrated their support by their magnificent enlistment in the armed forces and by assuming innumerable obligations in relationship to the control of civilian life. Let us, by the manner in which we aid in the programs for the rationing of fuel, gasoline and tires, demonstrate again to the people of America that confidence in and dependence on the medical profession is well warranted."

COMMUNIQUE

To the Editor:

Dear Dr. Brooksher:

After the army finally realized what a splendid soldier I was making, they sent me to Hill Field, Utah.

This is a wonderful country. Some say that elephants used to come here to die. They probably would yet if the aeroplanes weren't so noisy.

We are in the heart of the Rocky Mountains. A startling fact about Utah is that it would be bigger than Texas if the mountains were ironed out flat. It is snowing. The weather is as cold as a credit manager's stare and the wind is as sharp as a letter from the income tax commission.

The concentration of Mormons is noticeable. As far as I can tell, they are mighty fine folks. I understand they have discontinued some of their most interesting customs.

Wild game is in abundance. Hunters easily get their limit of deer. Geese and ducks are thicker on Salt Lake than detail men at a convention. I can personally testify that the Salt Lake is salty. I tasted of it.

Yesterday, I tried my hand at mountain climbing. After struggling exhausted and breathless to a hazardous ledge along the Wasatch, a sudden feeling of pride swept over me as I realized that now I was a seasoned mountain climber. This feeling was short lived, however, for when I turned around, I noticed that a cow had followed me up. She was contentedly chewing her cud. I quit 9,000 feet short of the top.

If I can find time and can get things in shape here, I shall probably go "abroad" come spring. Keep 'em fizzing.

Buck

Hollis H. Buckelew, Capt., M. C.,
Hill Field, Utah.

EXIGENCY OF WAR

Oleum Percomorphum 50% is now known as Oleum Percomorphum 50% With Viosterol. The potency remains the same; namely, 60,000 vitamin A units and 8,500 vitamin D units per gram. It consists of the liver oils of percomorph fishes, viosterol, and fish liver oils, a source of vitamins A and D in which not less than 50% of the vitamin content is derived from the liver oils of percomorph fishes (principally *Xiphias gladius*, *Pneumatophorus diego*, *Thunnus thynnus*, *Stereolepis gigas*, and closely allied species). Mead Johnson & Co., Evansville, Ind., U.S.A.

TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

A SECOND five-year review of tuberculosis in college students, marking the close of a decade of service by the Tuberculosis Committee of the American Student Health Association, reveals heartening progress, along with the stern challenge that tuberculosis still clings tenaciously to first place among causes of death in those of college age. Three hundred and four colleges and universities reported tuberculosis programs for 1940-41 as against 104 in 1936-37, but this represents a bare 36% of American institutions of higher education. Ancient and erroneous notions about tuberculosis still persist in the minds of many college administrators which unhappily limit the adequacy of their college health services. The truth must be carried to these people ceaselessly and convincingly, if we are to dislodge tuberculosis from the American college campus.

TUBERCULOSIS IN COLLEGE STUDENTS

The Tuberculosis Committee of the American Student Health Association was formed in 1931 following the First National Conference on College Hygiene at Syracuse University. At that time six institutions of higher education were known to have begun tuberculosis programs—the state universities of Minnesota, Michigan and Pennsylvania and Western Reserve University, Vassar and Yale. At the close of the first five years of the Committee's work, 50 colleges reported programs. Now, at the end of the second five years, 304 institutions so report. This number represents every section of the country, and includes endowed colleges and universities; state colleges, institutes, teachers' colleges and universities; and civic colleges and universities. State universities make the best showing; the small, privately endowed colleges the least satisfactory, as shown in the following table:

In 1936-37 there were 91 colleges using the tuberculin test on 56,224 students; in 1940-41, 255 colleges were doing so, and the number of students taking the test had increased to 149,744. The percentage of institutions using the Mantoux method has dropped in this period from 88% to 82%. Recent experiments in some localities with Patch testing, along with some schools using the Pirquet method because the state supplies only that type of testing material, account for the drop.

The number of colleges using routine chest films without prior tuberculin testing has increased from 12% in 1936-37 to 16% in 1940-41. A few colleges and universities have adopted miniature film mass surveys.

There has been an encouraging increase in the number of colleges examining non-student personnel. In 1936-37, 30 colleges required the ex-

Number of colleges with tuberculosis programs

Type of Institution	1936-37	1937-38	1938-39	1939-40	1940-41	Ratio of Increase
Endowed colleges.....	36	41	58	105	118	3.3
Endowed universities.....	8	14	20	20	35	4.4
State universities.....	15	19	24	30	36	2.4
State colleges and institutes.....	12	18	19	22	35	2.9
State teachers' colleges.....	31	38	37	65	70	2.3
Civic colleges and universities.....	2	3	7	6	10	5.0

amination of food handlers and 29 the examination of faculty and administrative employees, while in 1940-41 there were 108 colleges reporting the examination of food handlers and 92 the examination of faculty and administrative personnel.

The annual reports of the Tuberculosis Committee have disclosed a startling difference in the amount of tuberculosis in students discovered in colleges with case-finding facilities and in schools with no program of case finding. In this second five-year period, 1936-41, the colleges in the latter category reported the discovery of 184 new cases of tuberculosis among a student enrollment of 668,895, or 27.5 per 100,000. The colleges with case-finding facilities reported the discovery of 3,523 new cases in a student enrollment of 1,850,755, or a rate of 190.5 per 100,000, during the same period.

Roughly, this confers a ratio of seven-to-one in favor of the progressive colleges dedicated to the proposition that tuberculosis must be tracked down to its lair, found early, treated promptly, if it is to be defeated ultimately in the individual and in the nation. These figures imply that thousands of cases of tuberculosis, many of them infectious, are being harbored and ignored among American college students through utter failure of most colleges to comprehend that a threat to health truly exists and that a major social and economic problem clamors for action.

Letters from college administrators attempting to justify the non-existence of case-finding programs in their respective institutions indicate the prevalence of such ancient ideas as, that only when "consumption" arrives is tuberculosis present, that early tuberculosis can be ruled out by a doctor's cursory certification, or by stethoscopic search, or by stratified social selection. The survival of these fallacies among educated people represents our failure to carry the truth ceaselessly and convincingly to every person whose information, no matter how complete in most directions, remains barren with respect to tuberculosis.

The war, which brings in its train conditions of overcrowding and overwork, the disruption of public and private medical services, the curtailment of budgets and restriction of personnel, gives opportunity also for the increase of tuberculosis unless special efforts are made to guard against this menace. Army, Navy, industry, public health—all must fight together and against

tuberculosis, but it is of the very essence and function of education that colleges and universities lead the battle.

It is suggested that just as counties were once accredited for eliminating tuberculosis from their dairy herds, even as today they are being accredited in Minnesota for driving death rates and infection rates to low levels, colleges and universities might be accredited by the American Student Health and the National Tuberculosis Associations, once they have inaugurated and maintained acceptably a modern program against student tuberculosis. Laggard colleges might thus be tempted to make the necessary adjustments so that they could be listed on the Roll of Honor of progressive, public-spirited institutions.

The war must go on. The war must be won and we must win it, both from our external foes and from such borers-from-within as tuberculosis.

Tuberculosis in College Students, Charles E. Lyght, *Amer. Rev. of Tuber.*, Sept., 1942.

COMMUNIQUE

October 4, 1942.

To the Editor:

Just a note to give you my address so that you may continue to send me that criterion of all publications, "The Journal of the Arkansas Medical Society." You do not know what it means to us in the wilds. Seriously, just a note to tell you hello. That's all I can tell you as we are not allowed to tell where we are, what we are doing, or where we are going. I am well and healthy and am learning a lot. Am even learning X-ray.

Give my best to all and write me when you have time and let me know all the local dirt.

Best regards,

T. P. Foltz,
Lt., M. C., U. S. N. R.
Navy U. U. W.
Postmaster
San Francisco, California.

The President's Page

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OUR STATE HOSPITAL

Recently I visited our State Hospital and learned some facts which I think should be of interest to the public and also to the medical profession of Arkansas.

I find that there is less mental disease in Arkansas than there is in other states. We have one patient to 430 population, whereas, for example, in Massachusetts, the ratio is one to 250, and in the United States, as a whole, there is one to 325. Another significant fact is that this is a problem of great magnitude when we realize that 55% of all hospital beds in the United States are occupied by mental and nervous patients.

On October 5th there were 4,647 patients in the State Hospital. This seems to be approximately 1,000 more patients than there is room to accommodate comfortably. This means that they are terribly over-crowded and many of these people have to sleep on mattresses on the floor.

I also learned that only 5% of the patients are there because of neuro-syphilis. The public has the impression that most of the inmates are there because of this disease.

I have nothing but praise for the staff of this institution which is so capably headed by Dr. A. C. Kolb. They are doing the best job possible with the means that they have at their disposal. No superintendent could take more interest in doing a good job at this institution than Dr. Kolb. He deserves our commendation.

R. B. ROBINS, M. D., President.

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W. R. BROOKSHER, M. D., Editor
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EDITORIALS

COUNTY MEDICAL SOCIETIES

At this time county medical societies select
their official families for the coming year. It
seems proper to call attention to the vital need
at this time for the selection of earnest, altruistic
officers who have the best interests of the med-
ical profession and the public at heart. Organ-
ized medicine is now called upon to render a
greater service at a corresponding personal sac-
rifice by its membership to our country. The
demands of the military forces have resulted in
increased duties for those physicians who remain
at home. The medical profession will naturally
support the war effort to the full extent. We
have always done this. There is the equally im-
portant task of caring for those who remain at
home, who, too, are engaged in the war effort.
The job will try our persons and our facilities, but
it can and will be done.

It behooves each county medical society and
each individual member to study the demands
of the people for medical service and to know
how these can best be met. Service to the peo-
ple implies that each county medical society

know the situation locally with regard to curative
and preventive medicine. This requires that in-
dividual practitioners be well acquainted with
new developments and that there shall be no
medical problem within the county in which the
county medical society does not accept leader-
ship.

The stake of organized medicine in the present
troubled times is tremendous. Our present sys-
tem of private practice, based upon the family
physician-patient relationship, will be continued
when we have done the best job possible in the
distribution of the proper quality of medical serv-
ice to all who are in need of it.

DR. WOOTTON BECOMES PRESIDENT-ELECT
OF THE SOUTHERN MEDICAL ASSOCIATION

The Arkansas Medical Society rejoices in the
honor paid the Society and its illustrious mem-
ber, William Turnor Wootton, Hot Springs Na-
tional Park, who was unanimously elected Presi-
dent-Elect of the Southern Medical Association
at its meeting in Richmond, Virginia, November
10th.

Dr. Wootton has been a loyal worker in organ-
ized medicine throughout his years of practice.
Among the offices he has held are: President,
Garland County Medical Society; President, Ar-
kansas Medical Society; Vice-president and Coun-
cilor, Southern Medical Association, and Presi-
dent, Southwestern Medical Society. Perhaps
his greatest contribution toward elevation of the
standards of medical practice was his leadership
of the fight to free Hot Springs National Park
of the evils of "drumming," a bitter battle cul-
minating in success by passage of the Gant act.

The Journal well knows that under his leader-
ship the Southern Medical Association will con-
tinue to merit recognition as an outstanding
forum of scientific medicine and that it will at-
tain even greater renown and respect among
the physicians of the South.

EDITORIAL COMMENT

WAIVER OF ANNUAL ASSESSMENTS FOR
MEMBERS IN MILITARY SERVICE

In considering the waiver of annual member-
ship assessments for 1943 of those members now
on active military duty, the Council is calling
the attention of county societies to the appre-
ciable income loss which will result if this policy
is again adopted. The Council is, therefore,

requesting that all county societies which feel that they can pay this assessment for their members do so to avoid, insofar as possible, the curtailment of society activities which would follow such a reduction in income. It is felt that most of the county societies can pay these annual assessments and would be glad to make this contribution toward the expenses of the state society. However, should any county society feel that it is unable to make payment of the assessments, the state Society will waive the membership assessment of the members of that society for 1943 and continue these members in good standing.

ANNUAL ROSTER OF MEMBERSHIP

The Journal publishes in this issue a revised and corrected roster of those members whose annual assessment of membership has been received in the office of the state secretary. This supersedes the roster published in the November issue which, regrettably, had several omissions and errors.

HONORARY MEMBERSHIP

The provisions of the Constitution and By-Laws governing election of members to honorary membership are reviewed at this time for the information of all concerned. It is provided that, for a member to be elected a honorary member of the state Society, he must (1) have reached the age of 65 years, (2) must have been a member of his county society for the preceding 15 consecutive years, (3) must have been elected to honorary membership in his county society, (4) must be in good standing at the time of nomination, i.e., must have paid his annual assessment for 1943, (5) must be nominated for election to honorary membership by action of his county society, the nomination being directed to the Council, and (6) effective with 1938, must have paid his annual membership assessment each year prior to March 1st. Attention to these provisions will insure that those members who are qualified will be finally nominated for election at the annual session of the House of Delegates in Little Rock, April 20th, 1943.

FOR SALE—Complete modern office and laboratory equipment. New General Electric 30-milliampere combination radiographic and fluoroscopic shockproof X-ray unit with developing facilities, used 3½ months. Owner died recently. Will sell as a whole or in part. Address: Mrs. B. C. Routon, Ashdown, Arkansas.

PROCEEDINGS OF SOCIETIES

The Third Councilor District Medical Society met in Forrest City October 22nd for the following program: "Diagnosis and Treatment of Goiter," L. C. Sanders, Memphis; "Infantile Paralysis," A. H. Quinn, Memphis; "The Kinney Treatment of Infantile Paralysis (with demonstration)," Gilbert Levy, Memphis; "Injuries of the Abdomen," R. B. Robins, Camden, and "The Physician in Selective Service," Comdr. H. A. Higgins, Little Rock. Officers elected are: President, Thos. Wilson, Wynne, and Secretary-treasurer, J. O. Rush, Forrest City.

The Fourth Councilor District Medical Society met in dinner session at the Davis Hospital, Pine Bluff, October 20th. There was a general discussion on the problems created by the entrance of physicians into the armed forces. A sound motion picture on peptic ulcer was presented by a representative from John Wyeth and Brother. The society will next meet at McGehee in May, 1943.

W. A. Snodgrass, Jr., Secretary.

The Crawford County Medical Society was addressed October 27th by J. R. Crigler, Alma, on "The Treatment of Hernia."

The Lawrence County Medical Society was addressed at Imboden October 13th by H. B. Hull, Mammoth Spring, on "Diphtheria."

Chas. D. Tibbels, Secretary.

Prairie County Medical Society has elected the following officers: President, Edward Adams; President-elect, J. R. Lynn; Vice-president, John Crowley (in military service); Secretary-treasurer, J. C. Gilliam; Delegate, Edward Adams, and Alternate, J. C. Gilliam.

J. C. Gilliam, Secretary.

The Pulaski County Medical Society was addressed November 2nd by Paul C. Eschweiler on "Blood Bank."

Elizabeth D. Fletcher, Secretary.

The Sebastian County Medical Society was addressed November 10th by Capt. A. Tow, Camp Chaffee, on "Simplified Infant Feeding."

W. F. Adams, Secretary.

The Ouachita County Medical Society met in regular monthly session November 5th and was

MEMBERSHIP ROSTER OF THE ARKANSAS MEDICAL SOCIETY, 1942

ARKANSAS COUNTY

Davis, G. C.	Gillett
*Dickens, Homer	DeWitt
*Drennen, S. A.	Stuttgart
*Fowler, Arthur	Humphrey
†John, M. C., Jr.	Stuttgart
*John, M. C., Sr.	Stuttgart
†Lumsden, C. A.	DeWitt
*Rasco, C. W., Jr.	DeWitt
Swindler, E. B.	Stuttgart
*VanDuyn, T. S.	Stuttgart
†Wassell, C. M.	U. S. N.
*Whitehead, R. H.	DeWitt
*Wilson, J. G.	Keo
Word, J. T.	Sweet Home

ASHLEY COUNTY

†Atkinson, H. H.	Crossett
*Barnes, L. C.	Hamburg
†Burt, E. G.	Camp Barkeley, Tex.
*Cockerham, H. E.	Portland
Cone, A. E.	Portland
*Crandall, M. C.	Wilnot
Fletcher, G. W.	Montrose
Hawkins, M. C.	Parkdale
*Mask, D. L.	Hamburg
Parker, J. L.	Snyder
Pool, C. S.	Malvern
†Regnier, W. A.	Crossett
Smith, M. L.	Crossett
Spivey, C. E.	Crossett
*White, E. O.	Hamburg
Wood, J. T.	Crossett

BENTON COUNTY

Atkinson, R. M.	Bentonville
†Chastain, M. W.	Bentonville
Curry, W. J.	Rogers
Dixon, C. B.	Decatur
Estes, Neal D.	Rogers
Eubanks, F. G.	Decatur
Greene, L. O.	Pea Ridge
Gulledge, J. F.	Siloam Springs
Harrison, A. J.	Springdale
Hodges, Guy	Rogers
Hughes, G. A.	Siloam Springs
†Huskings, J. D.	Fort Benning, Ga.
Love, Geo. M.	Rogers
McNeil, Clyde	Rogers
Moore, W. A.	Rogers
Peacock, A. L.	Bentonville
Pickens, James L.	Bentonville
Pickens, W. A.	Bentonville
†Powell, J. T.	Gravette
Scott, L. L.	Siloam Springs
†Thompson, A. W.	Camp Bowie, Tex.
Thompson, J. S.	Gravette
Williams, J. R.	Siloam Springs
Wilson, C. S.	Siloam Springs

BOONE COUNTY

Blackwood, J. C.	Western Grove
*Fowler, J. H.	Harrison
*Fowler, Ross	Harrison
*Fowler, T. P.	Harrison
*Gladden, J. G.	Harrison
†Jackson, Ulys	Harrison
*Kirby, H. V.	Camp Shelby, Miss.
*Morrow, J. J.	Cotter
Moore, W. T.	Everton
†McCoy, O. B.	Harrison
*Owens, D. L.	Harrison
Poynor, W. H.	Harrison
*Rust, M. E.	Harrison
*Thompson, James I.	Yellville
Watkins, W. L.	Alpena Pass
*Weast, L. M.	Yellville

BRADLEY COUNTY

Crow, Marvin B.	Warren
Crow, Marvin T.	Warren
†Crow, Merle T.	Warren
Gannaway, C. E.	Warren
Hoffman, R. F.	Iowa City
*Hunt, W. J.	Warren
Martin, Charles	Warren
Martin, Rufus	Warren
Reasons, W. B.	Hermitage
Roark, W. N.	Hermitage

CARROLL COUNTY

Boen, L. R.	Oak Grove
Bohannan, J. H.	Berryville
Buit, W. A.	Green Forrest
*Carter, A. L.	Berryville

The Roster of the Arkansas Medical Society has been placed in the center of this issue to permit its ready removal for filing.

John, J. F.	Eureka Springs
McCurry, D. K.	Green Forrest
†Newkirk, W. H.	Camp Barkeley, Tex.
Roberts, D. C.	Berryville
Webb, J. H.	Eureka Springs

CHICOT COUNTY

Baker, E. E.	Dermott
Barlow, B. E.	Dermott
*Barlow, E. E.	Dermott
*Bottoroff, M. K.	Lake Village
*Burge, J. H.	Lake Village
Clark, B. C.	Lake Village
*Craig, W. A.	Snyder
*Douglas, S. W.	Eudora
†Easterling, W. D.	Lake Village
*Hutson, W. J.	Eudora
†Leverett, C. G.	Eudora
*McGehee, E. P.	Lake Village
*Schwarz, W. J.	Little Rock
Thompson, J. A.	Dermott

CLARK COUNTY

Barnett, J. R.	Arkadelphia
Bremer, J. P.	Point Cedar
Doane, S. N.	Arkadelphia
Magness, W. C.	Gurdon
*McLain, J. T.	Gurdon
Norton, J. M.	Arkadelphia
Pate, J. N.	Arkadelphia
*Reid, Joe W.	Arkadelphia
Ross, H. A.	Arkadelphia
*Townsend, Chas. K.	Arkadelphia

CLAY COUNTY

Blackwood, W. J.	Rector
Clopton, O. H.	Rector
†Futrell, J. B.	Rector
Hiller, J. P.	Pollard
Jones, F. H.	Piggott
Latimer, N. J.	Corning
McGuire, J. E.	Piggott
†Turner, W. E.	Ft. Leonard Wood, Mo.
Turner, W. E., Sr.	Piggott

COLUMBIA COUNTY

Baker, J. J.	Magnolia
†Carrington, H. K.	Savannah, Ga.
Cooksey, W. P.	Magnolia
Horn, W. H.	Magnolia
Hudnall, E. T.	Taylor
Hunt, W. J.	Magnolia
Jones, T. H.	Waldo
Jordan, T. S.	Magnolia
Kitchens, H. M.	Waldo
Longino, L. A.	Magnolia
McLeod, G. F.	Magnolia
Mullins, G. E.	Emerson
Rushton, J. F.	Magnolia
Smith, P. M.	Magnolia
Souter, A. J.	Waldo
Souter, T. E.	McNeil
†Weber, Chas. L.	Magnolia
Wilson, J. H.	Magnolia

CONWAY COUNTY

Etheridge, C. E.	Morrilton
Goatcher, A. L.	Plumerville
Hardison, T. W.	Morrilton
Jones, R. A.	Perry
†Matthews, J. M.	Morrilton
Mobley, H. E.	Morrilton
Scarlett, W. P.	Morrilton
†Williams, C. R.	Morrilton

CRAIGHEAD-POINSETT COUNTY

Alcott, Geo. B.	Weiner
†Barrett, E. R.	
Berry, W. E.	Trumann
†Blanton, M. E.	Ft. Sam Houston, Tex.
Burge, H. G.	Nettleton
Campbell, G. O.	Trumann
Cantrell, M. L.	Marked Tree
Cohen, O. T.	Jonesboro
Elders, J. W.	Harrisburg

Ellis, Ira W.	Monette
†Faris, John C.	Jonesboro
Horner, E. J.	Jonesboro
Jones, J. K.	Lepanto
Lutterloh, P. W.	Jonesboro
McAdams, H. H.	Jonesboro
McCurry, J. H.	Cash
McDaniel, E. C.	Tyrnza
McDaniel, L. H.	Tyrnza
Modelevsky, A. C.	Jonesboro
Moreland, W. H.	Tyrnza
Nisbett, Frank	Brookland
Overstreet, W. C.	Jonesboro
†Pierce, J. O.	Albany, Ga.
Ramsey, J. W.	Jonesboro
†Ratliff, R. W.	Jonesboro
Reves, L. E.	Monette
Shanlever, R. C.	Jonesboro
Sloan, Ralph	Jonesboro
Smith, O. V.	Trumann
Stroud, E. J.	Jonesboro
Stroud, H. A.	Jonesboro
Stroud, P. T.	Jonesboro
Thorn, W. T.	Marked Tree
Tullos, A. M.	Trumann
Verser, Joe	Harrisburg
Verser, W. W.	Harrisburg
†Reagan, C. H.	U. S. A.
Willett, R. H.	Jonesboro

CRAWFORD COUNTY

Bayan, C. E.	Mountainburg
Bennett, B. L.	Van Buren
*Bruce, B. B.	Alma
Boomer, F. A.	Van Buren
Campbell, C. J.	Mulberry
Crigler, J. R.	Alma
Galloway, Q. R.	Alma
Grant, S. C.	Mulberry
Kirkland, S. D.	Van Buren
†Kirkland, S. S.	Camp Barkeley, Tex.
Kirksey, O. J.	Mulberry
†Post, J. L.	Van Buren
Savery, H. W.	Van Buren
†Stewart, J. M.	Van Buren
Young, L. G.	Van Buren

CRITTENDEN COUNTY

Bond, S. D., Jr.	Crawfordsville
Hamilton, Ralph	West Memphis
Hare, T. S.	Crawfordsville
McVay, L. C.	Marion
Parker, A. C.	Clarksdale
Purnell, R. L.	Marion
Ray, R. H.	Earle
Stevenson, B. M.	West Memphis
Watson, H. S.	Earle

CROSS COUNTY

Barr, A. F.	Cherry Valley
Griffin, W. L.	Cherry Valley
Hickman, R. L.	Hickory Ridge
Longest, Ruffin	Wynne
Miller, J. S.	Parkin
Peterson, T. A.	Wynne
Price, Thomas	Wynne
Smith, R. S.	Parkin
Wilson, Thomas	Wynne

DALLAS COUNTY

Cheatham, H. A.	Princeton
Ellis, W. S.	Fordyce
Estes, E. E.	Fordyce
Lisenbee, A. M.	Sparkman
Taylor, J. E. M.	Sparkman
†Ward, W. P.	Ft. McIntosh, Tex.

DESHA COUNTY

*Biscoe, Gibbs	Dumas
Chennault, J. C.	McGehee
*Hellums, J. H.	Ft. Cronhite, Calif.
Kimbro, C. H.	Tillar
*Leverett, Marion	McGehee
MacCammon, Vernon	Ark. City
*Rands, H. A.	Dumas
*Smith, H. T.	McGehee
White, R. F.	McGehee

DREW COUNTY

†Binns, B. Z.	Ft. Benning, Ga.
Clarke, A. S. J.	Monticello
Collins, A. S. J.	Monticello
Dickins, R. D.	Monticello
†Gates, S. M.	Camp Chaffee, Ark.
†Holder, J. B.	New Orleans, La.
Pope, M. Y.	Monticello
*Price, J. P., Jr.	Monticello
*Wilson, J. S.	Monticello

* Wife is Auxiliary member.
† Military service.
† Deceased.

FAULKNER COUNTY

Baldrige, Doris Alene	Conway
†Baldrige, Max	U. S. N.
Brittain, W. L.	Conway
†Brooke, H. C.	Camp Young, Calif.
Dawson, R. L.	Bee Branch
Dickerson, C. H.	Conway
Downs, J. H.	Vilonia
†Dunaway, E. L.	Ft. Sam Houston, Tex.
Dunaway, L. S.	Conway
Fraser, N. E.	Conway
Harrod, George	Conway
Henderson, G. L.	Conway
Ingram, E. M.	Enola
Kitley, J. R.	Mayflower
Lieblong, J. S.	Greenbrier
Mabry, Tom	Vilonia
McCollum, I. N.	Conway
†Taylor, R. L.	Camp Barkeley, Tex.
†Westerfield, J. S.	Conway

FRANKLIN COUNTY

Bollinger, W. H.	Charleston
*Gibbons, W. H.	Ozark
Jewell, I. H.	Paris
*Pillstrom, E. W.	Ozark
*Porter, W. C.	Ozark

GARLAND COUNTY

†*Adams, Frank M.	Dillon, S. C.
Bieri, E. J.	Hot Springs
Black, T. N.	Hot Springs
Blackstone, W. M.	Hot Springs
Bollmeier, L. N.	Hot Springs
†Boydstone, J. O.	Camp Polk, La.
†Brewer, Howell	Seattle, Wash.
Browning, E. R.	Hot Springs
Burch, N. B.	Hot Springs
†Burch, F. M.	Washington, D. C.
*Casada, B. F.	Hot Springs
†Chamberlain, W. W.	Jacksonville, Fla.
Chesnut, J. H.	Hot Springs
Clardy, Floyd	Hot Springs
Coffey, G. C.	Hot Springs
Collings, H. P.	Hot Springs
Connell, W. H.	Hot Springs
Diederich, V. P.	Hot Springs
†Ellis, Jack	Hot Springs
Ellis, L. R.	Hot Springs
Fletcher, Geo. B.	Hot Springs
*Garratt, C. E.	Hot Springs
*Gray, W. E.	Hot Springs
Hebert, G.	Hot Springs
Jarrell, Foster	Hot Springs
†King, L. E.	Hot Springs
King, O. H.	Hot Springs
Klugh, W. G.	Hot Springs
Lee, D. C.	Hot Springs
†Lutterloh, C. H.	St. Petersburg, Fla.
Martin, L. G.	Hot Springs
Moss, C. S.	Hot Springs
*Nims, C. H.	Hot Springs
Pate, C. N.	Hot Springs
Porter, W. F.	Hot Springs
†Power, A. R.	Hot Springs
*Proctor, J. M.	Hot Springs
Purdum, E. A.	Hot Springs
*Reed, L. E.	Hot Springs
†Rowland, Driver	Albany, Georgia
†Rowland, J. F.	Hot Springs
†Scott, J. O.	Hot Springs
Scully, F. J.	Hot Springs
Shaw, Ernest	Hot Springs
Short, Z. N.	Hot Springs
†Smallwood, R. E.	Hot Springs
†Smith, E. M.	Houston
*Smith, O. A.	Hot Springs
Smith, W. K.	Hot Springs
Stell, J. S.	Hot Springs
*Stough, D. B.	Hot Springs
*Strachen, J. B.	Hot Springs
†Sullivan, A. G.	Pensacola
Tarleton, F. S.	Hot Springs
*Tribble, A. H.	Hot Springs
†Ulferts, U. R.	Hot Springs
Wade, H. K.	Hot Springs
Wilkins, J. S.	Hot Springs
*Wootton, W. T.	Hot Springs
Wright, H. K.	Hot Springs

GRANT COUNTY

Cole, C. F.	Prattsville
Cole, John W.	Sheridan
Cox, J. E.	Leola
Hope, O. W.	Sheridan
†Kelly, M. F.	Hot Springs
Kelly, O. R.	Sheridan
†Kelly, R. M.	Seattle, Wash.

GREENE COUNTY

Blackwood, J. D.	Jonesboro
Bridges, G. P.	Paragould
†Cupp, R. W.	Marmaduke
Dillman, J. A.	Paragould
Ellington, W. E.	Paragould
Haley, R. J., Jr.	Paragould
†Haley, R. J., Sr.	Paragould
†Hardesty, C. A.	Paragould
Huddins, J. J.	Paragould
Hutcherson, R. L.	Delaplaine
†Lamb, J. W.	Salt Lake City, Utah
Lamb, W. M.	Paragould
McKelvey, Earle D.	Paragould

HEMPSTEAD COUNTY

*Allison, W. G.	Hope
†Branch, J. W.	Camp Young, Calif.
Cannon, G. E.	Hope
Carrigan, P. B.	Hope
*Gentry, J. E.	McCaskill
*Lile, L. M.	Hope
Martindale, J. G.	Hope
*McKenzie, Jim	Louisville, Ky.
Robins, W. F.	Ozan
*Smith, Don	Hope
†Weaver, J. H.	Hope

HOT SPRING COUNTY

Barrier, W. F.	Malvern
Brown, H. L.	Malvern
Hodges, W. G.	Malvern
Kolb, Agnes C.	Malvern
Kolb, B. T.	Malvern
McCray, E. H.	Malvern
McCray, R. V.	Malvern
Prickett, M. D.	Malvern

HOWARD-PIKE COUNTY

Alford, T. F.	Murfreesboro
Dildy, E. V.	Nashville
Duncan, M. D.	Murfreesboro
Gibson, W. M.	Nashville
Gould, W. B.	Glenwood
†Holcombe, J. T.	Mineral Springs
Holt, H. H.	Nashville
Hopkins, J. S.	Nashville
Roberts, J. L.	Nashville
Simpson, W. B.	Nashville
Toland, W. H.	Nashville
Wood, R. L.	Malvern

INDEPENDENCE COUNTY

†Barger, O. B.	Philadelphia, Pa.
†Barnett, J. C.	Corpus Christi, Tex.
*Bone, O. L.	Newark
Buell, Louis	Batesville
Calaway, Hickman	Bethesda
Chambers, S. W.	Mountain Home
*†Churchill, C. A.	Louisville, Ky.
Copp, Noel	Calico Rock
*Craig, M. S.	Batesville
*Evans, L. T.	Batesville
Gray, E. M.	Mountain Home
*†Gray, F. A.	Batesville
Gray, W. Paul	Batesville
*Hinkle, C. G.	Batesville
*Jeffery, Paul	Bethesda
*Johnston, O. J. T.	Batesville
Jones, W. A.	Los Angeles, Calif.
*Ketz, W. J.	Batesville
*McAdams, V. D.	Cord
*†Monfort, J. J.	South Carolina
Robertson, S. N.	Sulphur Rock
Roe, C. E.	Viola
Weathers, J. L.	Salem
*†Weddington, R. E.	New Orleans, La.
Wilson, W. H.	Griffithville
Wood, O. S.	Salem
†Wyatt, F. Q.	Riverside, Calif.

JACKSON COUNTY

Best, A. L.	Newport
Elton, A. M.	Newport
Erwin, I. H.	Newport
Gray, C. R.	Newport
Harris, M. L.	Newport
Ivy, J. B.	Tuckerman
Jamison, O. A.	Tuckerman
Justice, S.	Swifton
Kimberlin, K. K.	Tuckerman
Norris, R. O.	Tuckerman
Owens, M. C.	Newport
Pierce, W. N.	Tupelo
Stephens, G. K.	Newport
Walker, H. O.	Newport
Watson, E. L.	Newport

JEFFERSON COUNTY

*Beard, J. C.	Pine Bluff
†Binns, Van C.	Ft. Bliss, Tex.
*Bruce, W. H.	Pine Bluff

Capel, C. B.	Pine Bluff
*†Capel, H. T.	U. S. A.
Carruthers, C. K.	Pine Bluff
*†Causey, H. A.	Pine Bluff
*Clark, O. W.	Pine Bluff
Cunningham, T. J., Jr.	Pine Bluff
Cunningham, T. J., Sr.	Pine Bluff
Dunham, B. E.	New Edinburg
Garratt, A. A.	Pine Bluff
*Hames, Fred	Pine Bluff
†Hankinson, O. C.	Pine Bluff
*Hancock, W. G.	Pine Bluff
Higginbotham, C. J.	Pine Bluff
Jenkins, J. S.	Pine Bluff
†John, J. W.	Pine Bluff
Lemons, J. M.	Pine Bluff
*Lowe, W. T.	Pine Bluff
Luck, B. D., Jr.	Pine Bluff
Luck, B. D., Sr.	Pine Bluff
*†Maynard, R. E.	Ft. Crook, Neb.
McMullen, E. C.	Pine Bluff
Palmer, J. T.	Pine Bluff
*Payne, Virgil	Pine Bluff
Robertson, A. B.	Rison
*†Russell, A. R.	Ft. Riley, Kans.
Ruth, Junius	Rison
Shelton, M. A.	Wabbaseka
Simmons, Walter	Pine Bluff
*Snodgrass, W. A., Jr.	Pine Bluff
*Spillyards, J. S.	Pine Bluff
*Walker, J. K.	Pine Bluff
Wood, R. P.	Altheimer

JOHNSON COUNTY

Burgess, M. E.	Phoenix, Ariz.
Floyd, John	Ozark
Graves, S. M.	Mt. Levi
*Hardgrave, Geo. L.	Clarksville
*Hunt, Earle H.	Clarksville
*†Johnston, R. H.	New Orleans, La.
King, R. E.	Harmony
*†Kolb, J. M.	Clarksville
Kolb, J. S.	Clarksville
Nichols, J. P.	Hagarville
Pierce, S. C.	Lamar
*†Shrigley, Guy	Santa Barbara, Calif.
Siegel, G. R.	Clarksville

LAFAYETTE COUNTY

Armstrong, R. L.	Lewisville
Baker, F. E.	Stamps
Keith, A. W.	Stamps
McKnight, J. F.	Bradley

LAWRENCE COUNTY

Ball, C. C.	Ravenden
Blaine, Mitchell	Mammoth Spring
Brown, W. W.	Hardy
Cruse, E. J.	Black Rock
†Elders, J. B.	Camp Forrest, Tenn.
Guthrie, T. C.	Smithville
Hatcher, W. W.	Imboden
Henderson, A. G.	Imboden
†Hughes, Max	Ft. Benning, Ga.
Hull, H. B.	Mammoth Spring
†Jackson, J. F.	Ft. Benning, Ga.
Johnson, T. Z.	Walnut Ridge
Kendall, W. S.	Cave City
Land, J. C.	Walnut Ridge
Martin, J. A.	Hoxie
Merrell, J. L.	Hoxie
Tibbels, C. D.	Black Rock
Townsend, C. C.	Walnut Ridge
Watkins, G. Max	Walnut Ridge

LEE COUNTY

Bogart, H. D.	Marianna
Chaffin, C. W.	Moro
Crawford, W. S.	Marianna
Hamner, J. H.	Aubrey
Hodge, N. C.	Marianna
McClendon, Mac	Marianna

LINCOLN COUNTY

Bailey, B. L.	Star City
Dixon, C. W.	Gould
Ringgold, G. W.	Gould
Taylor, L. T.	Star City
Thiolliere, A. C.	North Little Rock
Wood, G. C.	Grady

LITTLE RIVER COUNTY

Hamm, Pat	Ashdown
Harding, C. A.	Ashdown
King, E. R.	Ashdown
†Ringgold, J. W.	Ashdown
†Routon, B. C.	Foreman
Yates, E. W.	Foreman

LONOKE COUNTY

Beatty, S. S.	England
Callahan, E. A.	Carlisle
*Corn, F. A.	U. S. A.
Crowgey, W. B.	Scott
Southall, S. A.	Lonoke
Ward, O. D.	England
Watson, A. C.	Benton
Whaley, E. S.	Carlisle

MILLER COUNTY

Abrams, H. K.	Texarkana
Burnett, J. W.	Texarkana
Collom, S. A.	Texarkana
Daniel, N. B.	Texarkana
Daubs, W. H.	Texarkana
Good, L. P.	Texarkana
Hibbitts, Wm.	Texarkana
Hunt, Preston	Texarkana
Kirkpatrick, R. R.	Texarkana
Kemp, Karlton	Texarkana
Kittrell, T. F.	Texarkana
Kosminsky, L. J.	Texarkana
Lanier, L. H.	Texarkana
Laws, C. S.	Texarkana
Lee, A. G.	Texarkana
Lennard, F. M.	Texarkana
Middleton, B. C.	Texarkana
Murry, H. E.	Texarkana
Parsons, G. W.	Texarkana
Priest, P. D.	Texarkana
Robins, R. R.	Texarkana
*Porter, J. T.	Texarkana
Smith, W. D.	Texarkana
Williams, J. F.	Texarkana

MADISON COUNTY

Counts, G. D.	Wesley
Hill, N. J.	Hindsville
Youngblood, Fred	Huntsville

MISSISSIPPI COUNTY

Atkinson, G. S.	Blytheville
*Atkinson, George	San Francisco, Calif.
*Beasley, J. E.	Washington, D. C.
Boyd, D. L.	Blytheville
Brownson, J. F.	Blytheville
Dickerson, D. A.	Marked Tree
Campbell, J. H.	Marvell
Ellis, N. B.	Wilson
Fox, V. R.	Leachville
Frost, I. N.	Dyess
Harris, Charles P.	Leachville
Harwell, C. M.	Osceola
*Hassell, L. L.	Houston, Tex.
Hosey, N. R.	Marvell
Hubener, L. L.	Blytheville
Hudson, T. F.	Luxora
Husband, F. L.	Blytheville
Johnson, I. R.	Blytheville
Johnson, R. L.	Bassett
*McGuire, F. C., Jr.	Manhattan, Kans.
*Mahan, T. K.	San Francisco, Calif.
*Massey, L. D.	U. S. A.
Moseley, K. T.	Blytheville
Polk, J. T.	Keiser
Robinson, A. F.	Leachville
Robinson, H. D.	Manila
Saliba, J. A.	Blytheville
*Sims, H. C.	Blytheville
Skaller, M. L.	Blytheville
Smith, F. D.	Blytheville
Stevens, C. C.	Blytheville
Tidwell, J. L.	Dell
Turrentine, Portis	Wilson
*Walls, J. M.	Camp Gruber, Okla.
Webb, Floyd	Blytheville
Wilson, C. E.	Blytheville

MONROE COUNTY

*Boswell, W. L.	Clarendon
Bradley, W. T.	Blackton
*Dalton, M. L.	Brinkley
Martin, W. H.	Holly Grove
*McKnight, C. H.	Brinkley
*McKnight, E. D.	Brinkley
Murphy, N. E.	Clarendon

MONTGOMERY COUNTY

Freeman, W. D.	Mt. Ida
McLean, J. H.	Caddo Gap
Redman, John W.	Ft. Smith
Stueart, J. B.	Norman
Watkins, G. E.	Mt. Ida

NEVADA COUNTY

Archer, C. A., Jr.	Dumas, Tex.
*Buchanan, A. S.	Prescott
*Hairston, G. G.	New York
*Harrell, L. J.	Bauxite
*Hesterly, J. B.	Prescott

*Hirst, O. G.	Sherman, Tex.
Kennedy, J. W.	Prescott
McDaniel, W. F.	Boughton
Pool, W. B. H.	Bodcaw

OUACHITA COUNTY

*Byrd, E. J.	Bearden
*Clemens, J. P.	Stephens
*Dalton, P. J.	U. S. N.
*Early, C. S.	Camden
*Jameson, J. B.	Camden
*Kennerly, R. C.	Camden
*McGill, S. D.	Camden
*Parlee, N. G.	Camden
Plunkett, C. M.	Camden
*Powell, B. V.	Camden
*Rhine, T. E.	Thornton
*Rinehart, J. S.	Camden
*Robins, R. B.	Camden
*Robins, R. R.	Camden
Rushing, J. L.	Chidester
Thompson, H. F.	Bearden
*Thompson, S. A.	Camden

PHILLIPS COUNTY

Baker, J. P.	West Helena
*Blackwood, J. Q.	Baltimore, Md.
Butt, J. W.	Helena
*Connolly, W. B.	U. S. A.
Cox, A. E.	Helena
Cox, A. W.	Helena
*Dozier, F. S.	New York
Ellis, J. B., Sr.	Helena
Ellis, W. A.	Helena
Fink, M.	Helena
Herron, J. T.	Helena
*Johnston, W. W.	Manhattan, Kans.
*King, Jack	Jefferson Barracks, Mo.
King, J. A.	Elaine
King, J. W.	Helena
King, W. C.	Helena
Kultgen, Edward	Elaine
Maddox, A. H.	Elaine
Nicholls, J. W.	Helena
Norton, E. F.	Marvell
Orr, W. R.	Helena
*Parker, O.	Wabash
Rightor, H. H.	Helena
Russwurm, W. C.	Helena
Storm, Geo. R.	Helena

POLK COUNTY

Campbell, C. A.	Mena
Hawkins, B. H.	Mena
Heller, H. G.	Hope
*Hilton, J. G.	Mena
Lee, F. A.	Vandervoort
McElroy, F. Q.	Mena
Miers, E. M.	Mena
Norwood, Frank A.	Mena
*Redman, Pierre	Mena

POPE-YELL COUNTY

Ballenger, W. E.	Plainview
Gardner, Ellis	State Sanatorium
*Gardner, L.	Russellville
Gillum, A. D.	Bellville
*Grace, Kent	Carlisle Barracks, Pa.
*Griffin, E. P., Jr.	New Orleans, La.
Haney, A. C.	Russellville
*Hood, Robert	Russellville
Hunt, E. C.	Ola
Moore, J. H.	Delaware
Millard, Roy I.	Russellville
Montgomery, H. L.	Gravelly
Sexton, J. W.	Dover
Smith, R. L.	Russellville
Smith, L. M.	Russellville
Stanford, J. M.	Russellville
Tate, A. B., Sr.	Russellville
*Teeter, B. R.	Camp Claiborne
Young, W. O., Jr.	Russellville

PRAIRIE COUNTY

Adams, Edward	DeValls Bluff
*Calley, J. H.	Omaha, Neb.
Gilliam, J. C.	Des Arc
Lynn, J. R.	Hazen
*Parker, W. M.	Hot Springs
Porter, T. G.	Hazen

PULASKI COUNTY

*Aday, J. Leo	Little Rock
*Agar, John S.	Corpus Christi, Tex.
Alford, T. Dale	Little Rock
*Allen, Estes	Little Rock
*Allen, H. R.	Little Rock
Anderson, C. C.	Little Rock
Anderson, R. R.	Little Rock
*Arkebauer, C.	Little Rock
*Armstrong, H. M.	Houston, Tex.

*Askew, J. B.	Little Rock
Atkinson, Shelby	North Little Rock
*Autry, D. H.	Camp Robinson, Ark.
*Autry, P. G.	Little Rock
Banks, Jeff	Little Rock
*Barrier, L. F.	Little Rock
*Bennett, B. A.	U. S. A.
Bizzell, Ross	Little Rock
Blakely, R. M.	Little Rock
*Blankfort, Gerald	New York
Boyle, R. M.	Little Rock
*Briggs, B. P.	Little Rock
Brooks, C. M.	Little Rock
Brown, Martha M.	Little Rock
*Brown, T. D.	Lincoln, Neb.
*Buckeye, H. H.	Hot Springs
Burgess, T. E.	Little Rock
Burns, W. M.	Little Rock
*Calcote, R. J.	San Francisco, Calif.
Caldwell, Robert	Little Rock
Carruthers, F. W.	Little Rock
*Cazort, Allen G.	Little Rock
Cheairs, D. T.	Little Rock
Chesnutt, C. R.	Little Rock
*Choate, H. L.	Little Rock
*Church, B. L.	North Little Rock
*Clark, A. C.	Little Rock
Compton, J. N.	Little Rock
Coon, A. B.	Little Rock
*Cook, R. C.	Pensacola, Fla.
*Cope, E. P.	Grand Prairie, Tex.
*Cosgrove, K. W.	Little Rock
*Crawford, J. B.	Little Rock
Cull, S. T. W.	Little Rock
*Cullen, P. T.	Little Rock
*Cummins, Bryce	Little Rock
*Cunningham, J. C.	Little Rock
Daly, M. G.	Little Rock
Darby, W. J.	New York
Darnall, R. F.	Little Rock
Davis, J. C.	Little Rock
*Day, E. O.	Little Rock
Dean, G. O.	Little Rock
Dibrell, J. L.	Little Rock
Dibrell, J. R.	Little Rock
Dishongh, H. A.	Little Rock
*Donaldson, J. K.	Little Rock
Dykstra, D. W.	Little Rock
Easley, E. J.	McCombs, Miss.
*Eaton, John P.	Little Rock
Eschweiler, Paul C.	Little Rock
*Eubanks, R. M.	Little Rock
Fatherree, L. L.	Little Rock
Ferguson, R. L.	Edgewood, Md.
Fletcher, Elizabeth	Little Rock
*Fowler, H. D.	Camp Grant, Ill.
Freedman, Theo	Little Rock
*Fuller, H. L.	Little Rock
*Fulmer, D. W.	Little Rock
*Fulmer, P. M.	Little Rock
Fulmer, S. C.	Little Rock
Gann, Dewell, Jr.	Little Rock
*Gay, E. C.	Ft. Leonard Wood, Mo.
*Gray, A. F.	Little Rock
Gray, Oscar	Little Rock
Grayson, W. B.	Little Rock
*Greutter, J. E.	Ft. Sill, Okla.
*Hardeman, D. R.	Little Rock
*Harrell, W. B.	Canal Zone
Harris, F. W.	Little Rock
*Hayes, J. D.	Little Rock
Hayes, J. H.	Little Rock
*Henry, C. R.	Little Rock
*Higgins, H. A.	Little Rock
*Hollenberg, H. G.	Brigham, Utah
*Hollis, N. T.	Little Rock
Holmes, G. M.	Little Rock
Holt, L. G.	Little Rock
*Hoover, P. W.	Little Rock
Hummel, H. G.	Little Rock
*Hundley, John M.	San Francisco, Calif.
Hundling, H. W.	Little Rock
*Hyatt, C. L.	Camp Murray, Wash.
Hyatt, D. T.	Little Rock
*Hyatt, R. F.	Seattle, Wash.
*Johnson, Glenn H.	Little Rock
*Jones, H. Fay H.	Little Rock
Jones, J. E.	Little Rock
Junkin, S. P.	Little Rock
Kearney, Pauline	Little Rock
Kilbury, M. J.	Little Rock
*Kober, W. M.	South Dakota
Kolb, A. C.	Little Rock
Kory, R. C.	Little Rock
*Lamb, W. A.	Little Rock
*Langston, W. C.	Little Rock
*Law, R. A.	Little Rock
*Levy, J. S.	Ft. Bliss, Tex.
Lewis, G. V.	Little Rock
*Lyons, V. E.	Little Rock
*Mahoney, P. L.	Little Rock

*May, C. B.	Little Rock
†Mazzanti, Vincent	Little Rock
*McCaskill, M. E.	Little Rock
†McClain, M. D.	Ft. Riley, Kans.
†McLochlin, R. E.	Washington, D. C.
Melson, Madeline	Little Rock
Melson, O. C.	Little Rock
†Moore, Rufus D.	Camp Young, Calif.
Morgans, Dollie	Little Rock
*Murphy, Pat	Little Rock
*Newman, W. V.	Little Rock
†Nisbett, J. M.	Ft. Sill, Okla.
†Nixon, Ewing	San Francisco, Calif.
Nowlin, W. A.	Roland
*Oates, C. E.	Little Rock
*Parsons, J. E.	Little Rock
*†Parsons, W. R.	San Antonio, Tex.
*Patterson, R. Q.	Little Rock
Phillips, Sam	Little Rock
Phipps, W. E.	North Little Rock
†Raley, B. V.	Pensacola, Fla.
†Raney, T. J.	U. S. A.
*Reagan, G. W.	Little Rock
*Reagan, L. D.	Little Rock
*Reaves, B. J., Jr.	Little Rock
*Reed, C. C., Jr.	Little Rock
*Reed, C. C., Sr.	Little Rock
*Rhinehart, B. A.	Little Rock
*Rhinehart, D. A.	Little Rock
*Richardson, W. R.	Little Rock
*Riegler, N. W.	Little Rock
†Riggins, W. C.	Camp Robinson
†Ritchie, E. J.	Camp Grant, La.
†Ritchie, P. A.	Little Rock
†Roberts, J. N.	Ft. Knox, Ky.
*Robinson, B. L.	Little Rock
*†Rogers, Clyde D.	Little Rock
*Rosenbaum, Carl A.	Little Rock
Ross, T. T.	Little Rock
*Rowland, R. E.	Little Rock
*Sadler, W. L.	Little Rock
*†Samuel, John	U. S. A.
†Sanderlin, J. H.	Little Rock
†Sanford, S. M.	Hot Springs
†Savage, H. W.	Little Rock
*Saxon, R. L.	Little Rock
*Shipp, A. C.	Little Rock
*†Shipp, Harvey	Corpus Christi, Tex.
*Shuffield, J. F.	Little Rock
*†Shukers, C. F.	Camp Rucker, Ala.
*†Smith, J. W.	Wilmington, Del.
*Smith, R. T.	Little Rock
Smith, W. M.	Little Rock
*Snodgrass, W. A.	Little Rock
Sparks, A. R.	Little Rock
Stathakis, John	Lincoln, Neb.
*Stern, Howard S.	Little Rock
*Stewart, H. V.	Little Rock
Steinkamp, G. R.	Little Rock
Stover, A. R.	Holbrook, Ariz.
*Strauss, A. W.	Little Rock
*Summers, J. A.	Little Rock
*Switzer, D. M.	North Little Rock
Thomas, P. E.	Little Rock
*Thompson, E. I.	Little Rock
Thompson, G. D.	Little Rock
†Vinsonhaler, Frank	Little Rock
Wallis, Chas.	Little Rock
*Watkins, John G.	Little Rock
Watson, C. F.	Little Rock
†Washburn, A. M.	U. S. A.
*Wayman, A. K.	Little Rock
*Wayne, J. R.	Little Rock
Wayne, W. D.	West Fork
Webb, V. T.	Little Rock
Weny, N. F.	Little Rock
†White, E. H.	Little Rock
Wickard, C. P.	Little Rock
†Young, R. G.	Little Rock

RANDOLPH COUNTY

Baltz, M. A.	Pocahontas
Brown, J. W.	Pocahontas
Finney, C.	Maynard
Hamil, W. E.	Pocahontas
†Handley, E. L.	Pocahontas
Loftis, J. R.	Pocahontas
†Loftis, W. O.	Little Rock
Ryburn, J. W.	Pocahontas
Smith, J. E.	Reyno
Smith, R. O.	Biggers

ST. FRANCIS COUNTY

†Bogart, C. N.	Forrest City
†Bogart, J. A.	Forrest City
Burch, W. D.	Hughes
Caldwell, A. B.	Forrest City
Chaffin, E. J.	Hughes
Davis, Luther	Walnut Ridge
Davidson, J. S.	Forrest City
Lanier, Paul S.	Round Pond

McClendon, L. H.	Palestine
McCown, N. C.	Forrest City
Mohler, D. A.	Palestine
†Powell, C. V.	Forrest City
Rush, J. O.	Forrest City

SALINE COUNTY

Blakely, M. M.	Benton
Buckley, E. A.	Bauxite
*Buffington, T. E.	Benton
Curtis, W. C.	Benton
Gann, Dewell, Sr.	Benton
*Jones, C. W.	Benton
Little, Jess	Fort Smith
Phillips, B. L.	Little Rock
Ward, W. W.	Alexander
Walton, Chas.	Gulfport, Miss.

SCOTT COUNTY

Bevill, Cheves	Waldron
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SEARCY COUNTY

Bing, E. A.	Marshall
Cotton, J. O.	Leslie
Daniel, S. G.	Marshall
Evans, P. L.	Marshall
Fendley, E. G.	Leslie
Leslie, J. O.	Marshall
Rogers, W. F.	St. Joe
Wood, E. W.	Marshall

SEBASTIAN COUNTY

*Adams, W. F.	Fort Smith
†Amis, J. W.	U. S. N.
Arnold, W. O.	State Sanatorium
Barker, H. M.	State Sanatorium
Benefield, C. E.	Fort Smith
Benefield, J. H.	Fort Smith
Billingsley, C. B.	Fort Smith
*Blair, A. A.	Fort Smith
*Brooksher, W. R.	Fort Smith
*Chamberlain, C. T.	Fort Smith
Coffman, J. S.	Lavaca
*Crigler, R. E.	Fort Smith
Dickey, A. B.	State Sanatorium
*Dorsey, H. C.	Fort Smith
*Eberle, W. G.	Fort Smith
*†Finney, C. H.	U. S. A.
*†Foltz, T. P.	U. S. N.
*Foster, M. E.	Fort Smith
*Goldstein, D. W.	Fort Smith
*Hall, C. W.	Greenwood
Henry, Louise	Fort Smith
†Henry, L. M.	San Antonio, Tex.
†Hedrick, Rogers	Ft. Barrancas, Fla.
Hibbard, R. J. B.	State Sanatorium
*Hoge, A. F.	Fort Smith
Hollingsworth, G. F.	Hampton
*Holt, C. S.	Fort Smith
Holt, Ernest E.	State Sanatorium
†Honomichl, O. R.	Hackett
Johnson, Hugh	Fort Smith
†Johnson, J. D.	Ft. Snelling, Minn.
Johnson, J. E.	Fort Smith
*Jones, I. F.	Fort Smith
Jones, E. B.	Hartford
*Kellum, J. L.	Fort Smith
Kennedy, C. H.	Fort Smith
†Krock, F. H.	U. S. N.
*McConnell, S. P.	Booneville
Means, C. S.	Fort Smith
*Moulton, E. C.	Fort Smith
Moulton, H.	Fort Smith
Nowlin, R. R.	State Sanatorium
†Pride, Ben H.	Las Vegas, Nev.
Riley, J. D.	State Sanatorium
*Rose, W. F.	Fort Smith
†Schirmer, R. E.	Camp Chaffee, Ark.
Scott, M. H.	Fort Smith
*Smith, H. H.	Fort Smith
†Shippey, W. L.	U. S. A.
*Southard, J. S.	Fort Smith
*Stevenson, J. E.	Fort Smith
†Stocker, G. F.	U. S. N.
*Stubbs, S. P.	Fort Smith
Thompson, H. B.	Fort Smith
*Ware, B. L.	Fort Smith
†Wilson, C. L.	U. S. A.
*Wolfermann, S. J.	Fort Smith
*Woods, G. G.	Huntington
*†Woods, W. M.	U. S. A.

UNION COUNTY

*Atkinson, O. L.	Hampton
*Cathey, A. D.	El Dorado
Cullins, J. G.	N. Chicago, Ill.
†Cox, Vincent M.	U. S. A.
*Debolt, G. C.	El Dorado
*Fincher, L. G.	El Dorado
*Harper, J. W.	El Dorado
Irby, F. L.	El Dorado
†Jones, Gus	Ft. Benning, Ga.
*Kennedy, C. E.	Smackover

Kitchens, D. K.	Detroit, Mich.
*Levine, David	El Dorado
*Mahony, F. O.	El Dorado
*Mayfield, H. F.	Huttig
†Mayfield, H. J.	El Dorado
McCall, Daniel	Lawson
*McGraw, S. J.	El Dorado
*Mitchell, J. G.	El Dorado
Moore, B. L.	El Dorado
*Moore, J. A.	El Dorado
*Munn, E. J.	El Dorado
†Murphy, G. D., Jr.	Jefferson Brks., Mo.
Murphy, G. D., Sr.	El Dorado
Murphy, H. A.	El Dorado
*Muse, P. H.	Junction City
*Newton, W. L.	Smackover
*†Patton, Doyle	Ft. Ord, Calif.
†Pinson, J. H.	West Palm Beach, Fla.
Poole, Belle D.	El Dorado
*†Riley, W. S.	New York
*Russell, M. V.	El Dorado
Sheppard, Jack	El Dorado
Slaughter, J. W.	El Dorado
Smith, D. V.	Crossett
†Wharton, J. B.	Corpus Christi, Tex.
†Wharton, J. B., Sr.	El Dorado
*White, D. E.	El Dorado
Wozencraft, W. L.	El Dorado

SEVIER COUNTY

*Archer, C. A.	DeQueen
*Dickinson, R. C.	Horatio
†Hanchey, C. C.	Camp Crowder, Mo.
*Hendricks, J. S.	DeQueen
†Hendrix, B. E.	Gillham
*Hopkins, R. L.	DeQueen
*Jones, I. G.	DeQueen
*Kimball, G. L.	DeQueen
*Kitchens, C. E.	DeQueen
Livingston, S. R.	Santa Rita, N. Mex.
Norwood, M. L.	Lockesburg

WASHINGTON COUNTY

Alexander, Gilbert	Muskogee, Okla.
Baggett, Jeff	Prairie Grove
Bean, J. L.	Lincoln
Bunch, W. L., Jr.	Fayetteville
*Butt, W. J.	Fayetteville
*Callen, C. B.	Fayetteville
*Compton, Neil	U. S. N.
*Ellis, E. F.	Fayetteville
Farrior, L. B.	Fayetteville
Gilbert, A. A.	Fayetteville
†Harr, H. T.	Fayetteville
*Hathcock, Alfred	Fayetteville
*Hathcock, Preston	Fayetteville
*Hathcock, P. L.	Fayetteville
*Henry, R. T.	Springdale
*Huntington, R. H.	Fayetteville
Lesh, Ruth Ellis	Fayetteville
Lesh, V. O.	Fayetteville
*†Lewis, James F.	Corpus Christi, Tex.
*Miller, R. W.	Fayetteville
Mock, W. H.	Prairie Grove
Paddock, C. S.	Fayetteville
*†Richardson, Fount	U. S. A.
Robinson, J. A.	Summers
*Sisco, C. P.	Springdale
*†Sisco, Friedman	Camp Bowie, Tex.

WHITE COUNTY

Abington, E. H.	Beebe
Abington, W. H.	Beebe
Adair, T. L.	Bald Knob
Allbright, S. J.	Searcy
Burton, G. C.	Bald Knob
Dunkin, A. J.	Searcy
Felts, W. R.	Judsonia
†Hardy, F. P.	Searcy
Hassell, A. B.	Rose Bud
Hawkins, M. C., Jr.	Searcy
Huddigs, A. H.	Jonesboro
†Mobley, Hugh	San Luis Obispo, Calif.
Peeler, C. M.	Pangburn
Rodgers, P. R.	Searcy
Ruff, John L.	Searcy
Sloan, D. W.	Beebe
Sloan, J. R.	Garner
†Sneed, J. W.	Searcy
Spain, A. L.	Letona

WOODRUFF COUNTY

Brewer, E. F.	Augusta
Dungan, C. E.	Augusta
Evans, R. H.	Chaffield
Hays, J. F.	Augusta
Maquire, F. C., Sr.	Augusta
McAdams, J. C.	McClelland
Morris, J. W.	McCrary
Murphy, Frank	Lexa
Wilkins, W. T.	Cotton Plant
Williams, W. J. B.	Cotton Plant

entertained by Dr. and Mrs. J. B. Jameson with a delightful dinner at their home.

The program consisted of the following papers: "Duodenal Ulcer," H. W. Hundling, Little Rock; "What Can the General Practitioner Do About Sinusitis," Paul Mahoney, Little Rock, and "Jaundice," J. N. Compton, Little Rock.

R. B. Robins, Secretary.

PERSONALS AND NEWS ITEMS

Lt. Carl L. Wilson, Fort Smith, is now stationed at Station Hospital, Camp Maxey, Texas.

Major J. W. Branch, Hope, is now stationed with the 6th Armored Division Headquarters, Camp Young, Indio, California.

Daniel R. Hardeman, Little Rock, has been called to active duty as Captain, Medical Corps, U. S. A., and assigned to duty at Fort Sam Houston, Texas.

Elizabeth D. Fletcher has been elected secretary of the Pulaski County Medical Society.

Lt. Gerald Blankfort, Little Rock, is now stationed at Station Hospital Headquarters, Jefferson Barracks, Missouri.

The following have been appointed examiners for Selective Service: E. J. Stroud, P. W. Lutterloh, A. H. Hudgins, and H. H. McAdams, Jonesboro; Pat Hamm, DeQueen; H. A. Murphy, El Dorado, and S. J. Allbright, Searcy:

T. H. Jones, Waldo, has been appointed Captain, Medical Corps, Army of the United States, and assigned to Camp Robinson.

Robert Hood and Roy I. Millard, Russellville, attended the recent meeting of the Oklahoma City Clinical Society.

John C. Faris, Jonesboro, has been called to active duty as Lieutenant, Medical Corps Reserve, United States Army, and assigned to Army Air Force, San Antonio, Texas.

H. King Wade, Hot Springs National Park, was elected Chairman of the Section on Urology, Southern Medical Association, at the recent Richmond meeting.

Fred Hames, Pine Bluff, addressed the Section on Radiology, Southern Medical Association, at its Richmond meeting on "X-ray Therapy of Sinuses."

Lt. E. G. Burt, Crossett, is now stationed with the 501st Armored Field Artillery Battalion, Camp Chaffee, Arkansas.

W. T. Wootton, Hot Springs National Park, has been elected President-Elect of the Southern Medical Association.

Ellery C. Gay, Little Rock, has been promoted to the rank of Major.

Geo. B. Fletcher, Hot Springs National Park, has been elected Councilor, Seventh District, succeeding Euclid M. Smith.

Joe Verser, Harrisburg, has been ordered to duty as Captain, Medical Corps, and assigned to Camp Robinson.

S. B. Thompson, Camden, has been promoted to the rank of Captain, Army Medical Corps, and assigned to Camp Howze, Texas, as chief of orthopedic service.

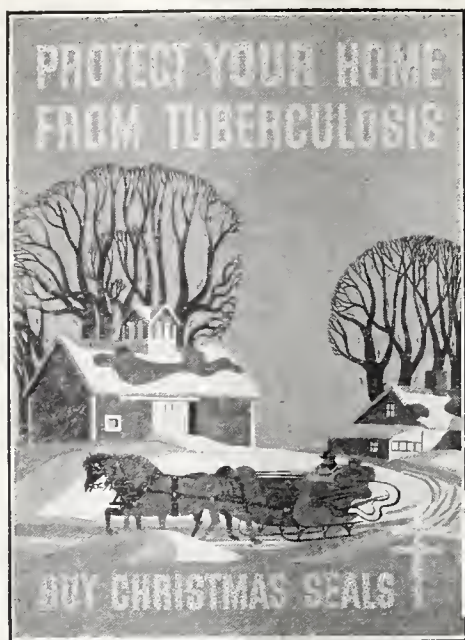
A. A. Blair, Fort Smith, spent a recent vacation in Alabama.

The following were registered at the Richmond session of the Southern Medical Association: Fred Hames, Pine Bluff; H. G. Hummel, Little Rock; N. T. Hollis, Little Rock; Madeline M. Melson, Little Rock; O. C. Melson, Little Rock; A. B. Tate, Russellville; H. King Wade, Hot Springs National Park; Chas. Wallis, Little Rock; C. M. Wassell, Little Rock, and S. J. Wolfermann, Fort Smith.

D. W. Goldstein, Fort Smith, spent a recent vacation in Mississippi.

OBITUARY

JESSE G. HILTON, age 68, of Mena, died November 8th. A graduate of the National University of Arts and Sciences Medical Department, Saint Louis, in 1905, he had practiced in Mena for many years. He was a past-president and the present secretary of the Polk County Medical Society. Surviving relatives are his wife and three daughters.



RANDOM THOUGHTS OF THE SECRETARY

October 22nd. The Rock Island is most conveniently late this morning and we are permitted a full night's sleep prior to driving to Booneville. Off at Forrest City with E. D. McKnight, who has decided there's no need to use tires to ride from Brinkley. Rush, Davidson and McCown are excellent hosts and the program is one of the better type. Our early arrival insures that we eat this night; on our last visit we almost missed the dinner.

Aboard the Rocket for the return, travel being so heavy that passengers take over the diner for seats. Completing our cross-country trip from Booneville by car in the unusual time of 85 minutes, an indication of what war speed means.

October 26th. Conferring with Martha Elliott of the Children's Bureau who shows a commendable intention to listen to problems in connection with obstetric and pediatric care as inaugurated in Arkansas, but who is a good trader in that she brings forth some of her problems for us to hear. Tonight, returning on the Frisco, the dinner guest of Clyde McNeil, who has friends in high places, as a dinner courtesy Frisco Lines sufficiently attests.

October 30th. Roy Millard comes in smiling and we are glad to see him up and about, ready to go to work, his disability being an indirect result of procurement and assignment.

October 31st. Returning to the days of youth we go with the youngster to watch the circus unload and like it all. Tonight riding to Little Rock, reading "When Doctors Are Rationed" which might better have been left in its original state as "Who's Your Doctor," Terry Townsend's speech, although since it was used freely, a credit line might be expected.

November 1st. Meeting with Barlow, Allbright, Harris and Johnson of the A. M. A. staff, we discuss industrial health and its application to Arkansas and organized medicine in Arkansas, finding that the doctors may well interest themselves in the situation and work to maintain

satisfactory relationships between employers, employees and physicians.

Nov. 4th. Engaged in a good samaritan act trying to help start a car, unthoughtedly we place fingers on the door sill and with closing of the car door, we extract one lacerated finger and one finger with a fractured phalanx. Life is not so dull with us.

Nov. 5th. Handicapped with a finger fracture, what we never boasted of—good handwriting—really becomes an impossibility.

Nov. 9th. This morning Clyde McNeil's prize hotel fails to call us and we miss the train home, being fortunate enough to get a taxi ride and arriving but two hours late at that. We are beginning to feel that there's some sort of a jinx at this hotel for us.

November 15th. In session with the Council this day where the discussion is principally on obstetric care for the wives of enlisted men but where opportunity is afforded Berry Moore to successfully pass a commendatory motion for the latest crusade of President Robins. Visiting the Fay Jones' just prior to train time and finding Edna enthused over a return to home and Fay, a thought for meditation. Homeward seeing for the first time, WAAC-coons, whose presence aboard causes the Missouri Pacific to violate the state Jim Crow law in the war effort.

November 17th. From an anatomical point of view it would appear that the Japs lost more than their faces in the Solomons yesterday.

WOMEN'S AUXILIARY NEWS

The Bowie-Miller County Medical Auxiliary met October 23rd at the home of Dr. and Mrs. Ralph Cross, Cross Patch, for its monthly meeting in observance of its twentieth anniversary.

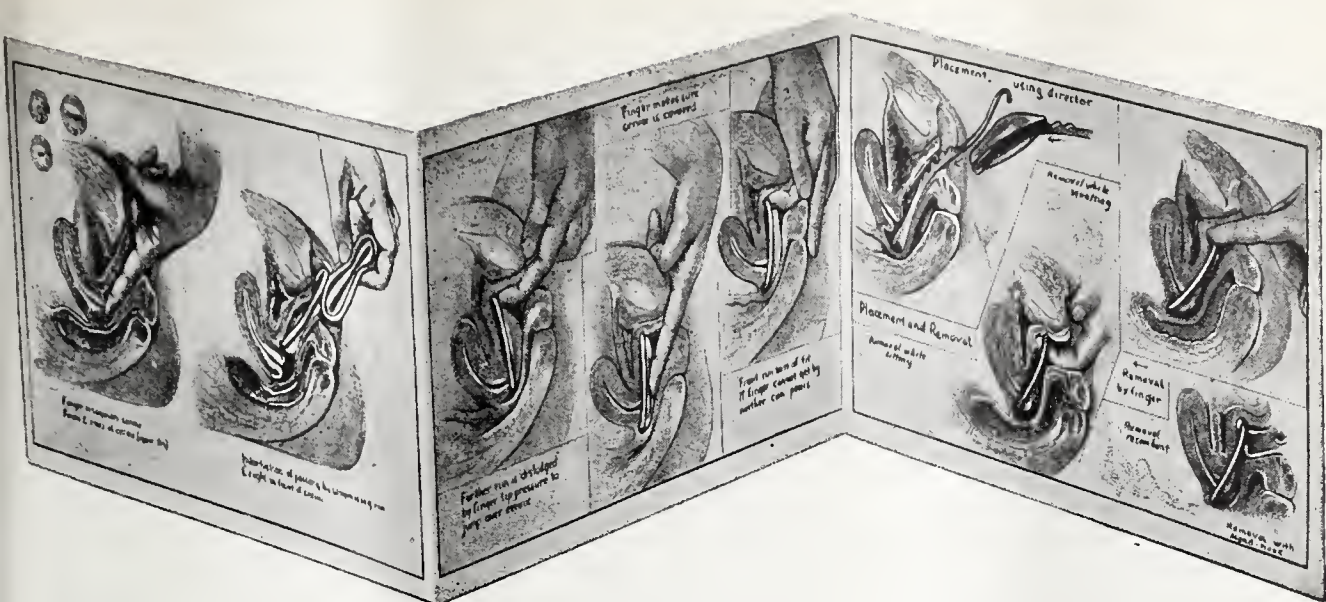
A Southern-style country breakfast was served to 25 guests from a highly polished mahogany table, centered by a white Grecian urn inlaid with gold and filled with white carnations, red and pink radiance roses and maiden's-hair fern. Red and pink radiance roses from Mrs. Cross' garden were used in profusion throughout the house.

Greetings were extended by the local president, Mrs. C. H. Frank, after which inspiration and informative talks were made by the Arkansas state president, Mrs. L. G. Fincher of El Dorado, and the Texas state president, Mrs. P. R. Denman, Houston. Favors of individual sachets made from an old-fashioned rose pot pourri were made and given by Mrs. L. H. Lanier to each guest.

The honor guests were Mrs. Fincher, Mrs. Denman, Mrs. S. A. Calburn, Sr., founder and first president of the Bowie-Miller County Auxiliary, and Mrs. N. Frank Armstrong, Fort Worth, state legislative chairman, who has been house guest of Dr. and Mrs. Cross for the past week.

Gifts were presented by the Auxiliary to its honor guests.

Hostesses for the meeting were Mrs. Ralph Cross, Mrs. Reavis W. Pickett, Mrs. L. J. Kosminsky, Mrs. E. L. Beck, Mrs. E. M. Watts, Mrs. Karlton Kemp, Mrs. S. A. Collum,



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Sr., Mrs. W. H. Daubs, Foreman, Ark., and Mrs. R. R. Kirkpatrick.

Members of the Sebastian County Medical Society Auxiliary and their guests heard an explanation of the block organization of the Volunteer Service Corps November 9th.

Mrs. Thomas Price Foltz, head of the organization, was the speaker.

Hostesses for the luncheon meeting were Mrs. M. E. Foster and Mrs. I. Fulton Jones. Mrs. J. L. Kellum, Auxiliary president, conducted the business meeting at which the organization pledged a contribution of \$5 to the Community Chest, and \$10 to the Arkansas Medical Association's student loan fund. Mrs. D. W. Goldstein was program chairman.

Mrs. M. E. Foster had as her guests: Mrs. Warner Bowers, Mrs. L. D. Soper and Mrs. Henry W. Grady, wives of officers of the army medical corps. Mrs. S. P. Stubbs was hostess to Mrs. D. W. Arterburn of Kansas City.

Members present were Mrs. W. F. Rose, Mrs. J. L. Kellum, Mrs. I. Fulton Jones, Mrs. B. B. Bruce, Alma, Mrs. D. W. Goldstein, Mrs. M. E. Foster, Mrs. S. P. Stubbs, Mrs. Thomas Price Foltz, Mrs. Walter G. Eberle, Mrs. W. R. Brooksher, Jr., and Mrs. C. W. Hall of Greenwood.

Mrs. W. F. Rose, Publicity Secretary.

The Auxiliary to the Sevier County Medical Society met at the home of Mrs. C. A. Archer in DeQueen, November 10th, with Mrs. Pierre Redman, Mena, presiding. Five dollars was contributed to the Student Loan Fund. Hygeia was ordered sent to eleven schools in the county. The following committees were appointed: Hygeia, Mrs. R. C. Dickinson; Program, Mrs. E. M. Miers; Education and Public Health, Physical Health, Mrs. J. S. Hendricks; Public Relations, Mrs. C. E. Kitchens; Cancer Control, Mrs. R. C. Dickinson. The program, "Feast for the Eye," was given by Mrs. J. S. Hendricks. The December meeting will be held at the home of Mrs. J. S. Hendricks with Mrs. Tate as co-hostess. Mrs. E. M. Miers and Mrs. Pierre Redman will give the program. Present: Mrs. O. B. Tate, Mrs. C. E. Kitchens, Mrs. C. A. Archer, Mrs. J. S. Hendricks, Mrs. R. C. Dickinson, Mrs. Clarence Hooper, Mrs. Leonard Hampson, Mrs. Pierre Redman and Mrs. E. M. Miers.

The Woman's Auxiliary to the Washington County Medical Society was addressed in October by Mrs. Roscoe Etter on "Hospitals in China."

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1912

Of The Journal of the Arkansas Medical Society published monthly at Little Rock, Arkansas, for October 1, 1942.

County of Sebastian, } ss.
State of Arkansas, }

Before me, a notary public in and for the State and county aforesaid, personally appeared W. R. Brooksher, who, having been duly sworn according to law, deposes and says that he is the editor of The Journal of the Arkansas Medical Society and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 411, Postal Laws and Regulations, printed on the reverse of this form, to-wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are: W. R. Brooksher, M. D., 602 Garrison Avenue, Fort Smith, Arkansas.

2. That the owner is: Arkansas Medical Society, Fort Smith, Arkansas.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: None.

4. That the two paragraphs next above, gives the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

W. R. Brooksher, Editor.

Sworn to and subscribed before me this 25th day of September, 1942.

(SEAL)

S. B. Stevinson, Notary Public.

My commission expires April 23, 1946.

The Neurological Hospital provides a complete diagnostic service for psychiatric and neurological patients, and utilizes modern methods of therapy such as insulin and curare-electric shock. Treatment programs are based upon total patient therapy from the standpoint of internal medicine, surgery and the other specialties, as well as the psychiatric and neurological symptomatology.

NEUROLOGICAL HOSPITAL



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Kansas City, Missouri

THE ROBINSON CLINIC

G. WILSE ROBINSON, M.D.
G. WILSE ROBINSON, Jr., M.D.
PRIOR SHELTON, M.D.



Lessons from Pearl Harbor

Destruction of barracks at Wheeler Field, T. H., December 7, 1941.
Photo by U. S. Army Signal Corps.

OUT of the chaos and confusion—the burns, lacerated wounds and compound fractures—that was Pearl Harbor on that first Sunday of December, 1941—have come many lessons. Not the least among them is the value of the sulfonamides—used topically for the management of the potentially infected traumata.

Field conditions were ideal for the production of Clostridial infections—yet the incidence of gas gangrene was remarkably low and resulted in no deaths. Hospital facilities and surgical skill were hard-pressed and surgical operations were delayed from hours to days. Due in no small measure to the use of the sulfonamides, postoperative mortality was only 3.8 per cent, and most of these fatalities were from shock and hemorrhage.

Topical use of sulfonamides is assuming increasing importance not alone in military prac-

tice but in industry and civil life. These compounds should be regarded as an important adjunct to surgery, regardless of whether the surgeon is dealing with grossly contaminated wounds or maintaining asepsis in his operative field. Further studies must, of course, be made to determine the method of application best suited for each type of wound.

The Squibb Laboratories have available many of the sulfonamide compounds. There are several dosage forms under laboratory and clinical investigation and these will be provided as the need arises and results prove favorable.

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BOOK REVIEWS

Dr. Colwell's Daily Log for Physicians. Price \$6.00. Champaign, Illinois: Colwell Publishing Company.

This most efficient and compact record system for physicians merits its increasing favor by physicians over the country. We again recommend it, as we have for several years, as the most desirable and satisfactory system of accounting available to the individual physician.

1942 Yearbook of Radiology. Edited by Charles A. Waters, M. D., Johns Hopkins University, Baltimore, and Ira I. Kaplan, M. D., Director, Radiation Therapy Department, Bellevue Hospital, New York. Pp. 496. 496 illustrations. Price \$5.00. Chicago: The Yearbook Publishers, 1942.

Maintaining its usual high standard, this year's volume presents the facts from 457 contributions to radiological literature. 132 new or improved diagnostic measures and 129 treatment procedures are described.

The profusion of illustrations add to the clarity of the descriptions. The progressive radiologist considers this a necessary book.

The Hand—Its Disabilities and Diseases: By Condict W. Cutler, Jr., M. D., F. A. C. S., Associate Surgeon, Roosevelt Hospital; Director of Surgery, Welfare Hospital; Consulting Surgeon, New York Dispensary; Chief, Emergency Medical Service, New York County; Fellow of the American Surgical Association. 572 pages with 274 illustrations. Philadelphia and London: W. B. Saunders Company, 1942. Price \$7.50.

This book discusses in a thorough manner the anatomy of the hand, its many infections, its fractures and dislocations, presenting accepted modes of treatment for each condition. Reconstruction of the deformities which follow burns, trauma and infections together with the types of amputation are likewise adequately presented. The volume will be of much help to those who are called upon to treat this important extremity.

The Care of the Aged (Geriatrics): Fourth Edition, by Malford W. Thewlis, M. D., Attending Specialist, General Medicine, United States Public Health Hospitals, New York City. 581 pages, 35 illustrations. Price \$7.00. St. Louis: The C. V. Mosby Company.

Recent rapid developments in geriatrics have made a fourth edition necessary. This volume is very important and timely. National defense is requiring greater attention to the problems of conserving the health and vigor of the older age groups of the population. Geriatrics will play an important part in the all-out war effort. New features of the fourth edition are: supplementary material and references on subjects such as respiratory infections, liver function, blood transfusion, surgical application of chemo-therapy, nutrition in old age, industrial habilitation, old age and medical economics and industrial health problems. The book is divided into five sections. General considerations are taken up in Section I; miscellaneous geriatric problems in Section II; infectious diseases in Section III; allergy, alcohol, and focal infections in Section IV; pathologic conditions in old age in Section V. This volume is decidedly worthwhile for all those who are engaged in the care of the aged.

Nephritis: By Leopold Lichtwitz, M. D., New York. Pp. 328. Price \$5.50. New York: Grune and Stratton, 1942.

The author concisely deals with the physiology and pathology of the kidney, the clinical types of nephritis and their diagnosis and treatment. It is a ready available reference source.

Synopsis of Pathology: By W. A. D. Anderson, M. A., M. D., Assistant Professor of Pathology, Saint Louis University School of Medicine, etc. Pp. 661. 294 text illustrations and 17-color plates. Price \$6.00. Saint Louis: C. V. Mosby Company, 1942.

This volume is neither an elementary manual nor a complete reference text but a book which fills in and should well serve the medical student and the clinician who are neither learning pathology nor devoting full time to the speciality. This purpose is attained in an instructive work.

Advances in Internal Medicine: Edited by J. Murray Steele, M. D., New York City. Pp. 292. Price \$4.50. New York: Interscience Publishers, 1942.

Ten subjects are presented by ten authors in this small volume, each discussing thoroughly a particular branch of internal medicine. There is some doubt that all of the subjects presented have received recent advances of significance.

Advances in Pediatrics: Volume I. Edited by Adolph G. De Sanctis, M. D., New York Postgraduate Medical School, New York. Pp. 306. Price \$4.50. New York: Interscience Press, 1942.

The author has selected authorities and has asked them to present various significant contributions to pediatric knowledge. This volume should be of particular interest to the general practitioner.

Clinical Anesthesia: By John S. Lundy, B. A., M. D., Head of Section on Anesthesia, Mayo Clinic; Professor of Anesthesia, Mayo Foundation for Medical Education and Research, Graduate School, University of Minnesota; Diplomate and Member of the American Board of Anesthesiology, Inc.; Member of the Subcommittee on Anesthesia, National Research Council. 771 pages with 266 illustrations. Philadelphia and London: W. B. Saunders Company, 1942. Price \$9.00.

Dr. Lundy, of Mayo Clinic, kept records of approximately 1,200 cases, and from these and the knowledge of men who possessed special knowledge of methods has written this book. He tells how to select anesthetic agents and methods. He describes most of the methods of anesthesia. Theories are almost eliminated, and descriptions of technique are rather limited, yet full enough for not only anesthetists, but for the surgeons as well. Other information has been placed in separate chapters called "Instructions to Physicians, Dentists, Nurses and Assistants; Equipment and Drugs Used in Anesthesiology." He names and describes stages and planes of anesthesia, care and medication during and post-anesthesia. He also includes venipunctures, intravenous therapy, resuscitations and oxygen therapy.

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No. 8

THE KIDNEY IN HYPERTENSION*

W. J. McMARTIN, M. D.
Omaha

Hypertension has been listed as a disease which causes death directly or indirectly in 350,000 persons (1) each year in the United States. Arterial hypertensive disease is the leading cause of death (2).

The medical profession as a whole has been attempting to cope with this situation in an enforced, haphazard manner. We have realized that the entire problem is a puzzling one from both the standpoint of relieving the patient of his symptoms, and in curing him of his affliction. To find the origin of high blood pressure has been a baffling and long struggle for us all.

The trend of medicine in this century has been toward great advances in the preventive field. Much has been done with the infectious diseases, the vitamin deficiencies, the anemias, and the metabolic disturbances, but the cardiovascular-renal branch of preventive medicine is still in its infancy. The clinician, the pathologist, the physiologist, the biochemist and the pharmacologist must work hand in hand to a much greater extent than they have been in order to solve unanswered questions in the field of cardiovascular-renal disease.

Up until the end of the nineteenth century hypertension in all of its phases had been considered a non-surgical problem requiring medical care only, such as rest, correct diet, removal of foci of infection and various forms of medicines which depressed the blood pressure. Supportive measures were undertaken if evidence of heart failure appeared.

With the development of the cystoscope as a diagnostic and treatment aid the urologist has been able to help greatly towards relieving a few of the patients of hypertension.

All of you have seen patients who have shown signs of prostatism such as day and night-time frequency of urination, loss of weight and appe-

tite, mental sluggishness, anemia, constipation, and high blood pressure develop into normal individuals following correction of the obstruction at the neck of the bladder. The blood pressure of many of these prostatic patients drops to normal following operation on the neck of the bladder who formerly had quite severe elevation of their pressure. True, not all of them have developed normal pressures postoperatively, but many who have not have had their symptoms of prostatism over too long a period of time which has allowed permanent damage to intervene in the cardiovascular-renal system. It is in the field of obstructive uropathy that much has been done in the prevention of permanent hypertension in these individuals so affected.

* It is not only to the pioneers in urology that great appreciation is due but also to that great group, the family physicians, who have made themselves cognizant of the situation, and have directed these unfortunate patients with prostatism to seek proper treatment for their pathological condition.

We owe a great debt to Goldblatt and to his co-workers for opening new avenues of experimentation and treatment for hypertension. They have showed that applying adjustable clamps to the renal artery of a dog, thus causing compression and ischemia of the kidney, hypertension resulted. By the term "renal ischemia" is meant a decrease in the blood flow through the kidney. Goldblatt's work has produced a wealth of valuable experimental data, and other investigators have added to it.

Some have thought that compression of the renal artery has caused hypertension by creating a reflex action on the nerve supply to the kidney, but others have shown that this abnormal rise in blood pressure is not prevented nor relieved by denervation of the pedicle of the kidney (3), excision of the splanchnic nerves (4), complete sympathectomy (5), nor by complete destruction of the spinal cord (6).

Hypertension has also been produced by constricting the blood supply to a kidney transplanted to the neck (7), or to the groin (8). The

* Read before the Sixty-seventh Annual Session, Arkansas Medical Society, Hot Springs National Park, April 28, 1942.

aforementioned experiments were of course done on dogs.

However, it has been shown that results of some of these operations which have been performed on humans have given beneficial effects in lowering the blood pressure, but in the majority of patients these effects have been lost in a comparatively short time. The physiological changes in humans have been the most successful when the extensive denervation by the Smithwick method was performed. This operation causes partial failure in the venous return flow of blood which lowers cardiac output, thus lowering the blood pressure. Page feels that the difference in the results of sympathectomy on humans with hypertension and dogs is because of the erect posture assumed by man and that dogs have a lowered degree of reactivity of their visceral splanchnic innervation (9). This operation, therefore, does not correct the pathological physiology generating the elevation in blood pressure. It creates a corrective physiological change, but does not correct the disturbance in the heart or peripheral blood vessels.

I am not condemning the neuro-surgical operation of sympathectomy. It has in many cases reduced the blood pressure, cleared up symptoms of hypertension and even cleared up the "cotton wool" eyegrounds with elimination of papilledema. However, the operation is not curative.

It is not generally accepted that the nervous system plays a primary role in the genesis of hypertension.

The endocrine glands play some part in the creation of hypertension. The hypophysis with basophilism and adenomata are associated with abnormal elevation in blood pressure. Hypotension is present in Simmond's disease. Removal of the hypophysis in hypertensive animals reduces the blood pressure slowly but by no means to normal (10).

The adrenal glands are important in hypertension. Carcinoma of this gland causes hypertension. Addison's disease causes hypotension. Adrenal pheochromocytoma release, at intervals, varying amounts of adrenalin which results in paroxysmal hypertension. It has been shown that hypertension can be maintained in the absence of the adrenal glands when sufficient treatment with salt and cortical extract or desoxycorticosterone acetate is given (11). Hyperplasia of the adrenal cortex, hypertrophied veins and adrenal adenomata can cause hypertension, but it is not felt that these findings give sufficient evidence to warrant not investigating elsewhere for a more important factor in hypertension.

The work of Goldblatt has led us to investigate the kidney thoroughly for the origin of high blood pressure.

As far back as 1898 it was known that extracts of kidneys contain a substance which has a definite hypertensive effect when injected into dogs. Many workers have repeated this experiment with conflicting results. Some have confirmed the presence of a pressor substance. Others report depressor effects, and others found both a depressor and pressor substance.

This pressor substance has been named renin. It should be pronounced renin to keep from confusing it with the milk-curdling ferment found in gastric juice.

It has been shown physiologically that there is some substance given off by the kidney which creates hypertension. When Goldblatt's experiment is repeated, and the ischemic kidney is transplanted to the neck of a second dog, hypertension occurred in the second dog (12). Normal kidneys apparently secrete none of this substance. Thus was opened an entirely new investigative field, that of the humoral mechanism of hypertension.

There are many strong arguments to favor the humoral origin of hypertension. It has been demonstrated that renin does not in itself cause hypertension, but that renin is activated when it comes in contact with the plasma of the blood. Whatever this activator is has been termed renin-activator, which converts renin into the pressor substance. It is now known as angiotonin (13).

Angiotonin injected intravenously into humans or animals causes the same physiological changes from the normal as are found in hypertensives. The skin temperature does not become lowered showing that angiotonin does not cause a decrease in blood flow to the periphery (14) (15).

Angiotonin causes a decrease in renal plasma flow below normal without creating subnormal glomerular filtration (16). This is due not to the increase in blood pressure, which would create an increased plasma flow to the kidneys, but is the result of a valve-like effect on the efferent glomerular arterioles, which raises intra-glomerular pressure. This maintains a normal glomerular filtration rate despite a lowered plasma flow to the kidneys. In other words, the injection of angiotonin creates the changes in intra-renal hemodynamics just as found in hypertensives, namely, decreased renal plasma flow and normal glomerular filtration. It also causes an increase in blood pressure to a high level.

Angiotonin differs from other known pressor substances in its pharmacology. The pressor ef-

fects of adrenalin are reversed by ergotamine to that of a depressor, but angiotonin is not affected. Angiotonin acts in its full pressor effect despite destruction of the test animals spinal cord by pithing (17).

There are also reasons for believing that the kidney contains antipressor as well as pressor substances (18). This antipressor substance is still in the experimental stage, but Irvine Page has shown that this extract not only lowers the blood pressure, but relaxes the constricted efferent arterioles (19). The result of injections of this extract increases the blood flow to the kidneys. Of course, if there is marked sclerosis of the vessels of the kidney, the blood flow will not be increased as much as in the kidney with less or no vascular sclerosis.

This extract has lowered the blood pressure of hypertensives for periods of months to years, but Page himself has said that not sufficient time has elapsed to determine whether the benefits will persist.

Another interesting experiment has been carried out to determine the points of origin of renin in the kidney. Goormaghtigh and Grimson (20) have shown changes in the media of the intralobular and glomerular arteries of dogs made hypertensive by the Goldblatt clamp method. The media of these arteries of normotensive dogs and humans contain ordinary smooth muscle cells, and larger more afibrillar cells and probably less contractile cells. These cells are found in groups at the vascular poles of the glomeruli to form a "juxta-glomerular apparatus." These cells are found elsewhere in the body. They are found in the arterial vessels of the glomus carotidum and glomus aorticum and in the vascular glomi of the skin. They are also found in a subendothelial position in the region of the carotid sinus. Their close association with the carotid sinus and the cardiopressor and chemoreceptor regions suggest that these cells may be the secretory centers of the hypertensive principle of ischemic kidneys. Hypertrophy and hyperplasia of these cells have been found in the media of the arteries and arterioles of ischemic kidneys of hypertensive dogs. The smooth muscle cells in some of the intralobular arteries have enlarged and become afibrillar with hypertrophied nuclei. Numerous mitotic nuclei have been found in this particular tissue. In some places the afferent glomerular arterioles have become obstructed by the hypertrophy and hyperplasia of these cells, resulting in atrophy of the associated glomeruli.

These cells are found in the cortex of the kidney. It has been shown that anaerobic autolysis of the renal cortex or cell-free cortical extract

of the dog produces a powerful heat stable pressor substance that passes through a celloidion membrane. This pressor substance has not up to this time been obtained from the medulla of the kidney subjected to the same conditions (21).

However, proof has not been established that these cells are the origin of the pressor principle in hypertension (22). In some cases of hypertension these cells have been found to be hypertrophied and hyperplastic, in others not so. Dr. Irvin Fraef (23) tells me that in two individuals without hypertension he found these cells markedly hyperplastic and hypertrophied.

Another interesting phenomenon has been shown by Bing and Zucker (24). The kidneys contain numerous metabolic enzymes. Two of these are known to convert amino acids into simpler end products. First, the amino acids are acted upon by certain special catalysts which remove from each a carboxyl group. These amino acids are thus transformed into amines. Aqueous extracts of the renal cortex have repeatedly shown the presence of these decarboxylating enzymes. It has been shown that amines can cause hypertension equal to equivalent doses of epinephrine.

These enzymes act only under anaerobic conditions to create pressor amines. When oxygen is present these amines are converted into substances which are not hypertensins.

Experiments on the cat have shown a marked rise in blood pressure in every one when the pedicle of one kidney was clamped so that the circulation of the kidney was completely shut off, and a typical amino acid was injected under the capsule of the kidney, and the kidney clamp was removed two and a half hours later. The average rise in blood pressure was 68mm. of mercury. In control animals release of the clamps after two and a half hours showed no rise in pressure. Within two and a half hours a totally ischemic kidney is able to convert amino acids into corresponding amines. This chemical reaction does not occur in normal kidneys, or the amino acids are completely destroyed. Further tests in partial obstruction to the renal flow with injection of the amino acid also produced a marked rise in blood pressure.

Both of these experiments show that lowered oxygen content of the circulating blood in the kidney is conducive to the formation of pressor substances which differ from the protein-like renin in that it takes from four to six hours longer for the ischemic kidney to produce renin than it does the pressor amines.

It is possible that in some of our patients with obstruction of the urine in the pelvis of the kid-

ney causing pressure on the renal pelvis in the sinus of the kidney, and resultant pressure-obstruction to the blood flow through the kidney, this chemical mechanism takes effect to produce hypertension.

All of the aforementioned experimental work has been of great interest to the clinician, and has shown him that the kidney definitely is a source of hypertension.

Do not misunderstand me. I am not claiming that the kidney is the only source of hypertension.

I have told you earlier that the nervous system and the endocrines play some part. Also there is a family tendency to hypertension. Osler has remarked that certain families and certain individuals are unfortunately endowed with what he calls "poor tubing."

Since Goldblatt first demonstrated that ischemic kidneys have the ability to create marked hypertension, many clinical reports have appeared in the literature demonstrating that numerous pathological changes in the kidney have been the source of hypertension. Many of these patients have been operated upon with removal of the offending kidney, and there has been a subsequent return of the blood pressure to within normal limits.

The following list names the diseases involving the kidney primarily, that can create high blood pressure: hydronephrosis, aneurysm of the renal artery, congenital anomalies affecting the entrance to the lumen of the renal artery, pyelonephritis with and without renal atrophy, localized arteriosclerotic plaques narrowing the lumen of the renal artery, perinephritic adhesions following a former surgical procedure on the affected kidney, renal calculi, renal tuberculosis, severe renal injury from trauma, thromboangiitis obliterans of the renal artery, large infarctions of the kidney, compression of the renal artery by extrinsic lesions, papillary tumors of the renal pelvis, hypernephroma, ptosis of the kidney, and an aberrant vessel at the uretero-pelvic junction causing hydronephrosis.

The urologists will all grant, I am sure, that the relief from hypertension following operation upon the affected kidney is not always accomplished. Often times when the blood pressure has fallen, even to normal, it gradually becomes elevated to its former hypertensive level. This, of course, means pathological changes in the vascular system elsewhere in the patient. These hypertensives have to be diagnosed early, and operated soon thereafter.

The eyegrounds should not as a rule show sclerosis, but one patient (25) has thus far been

relieved of hypertension who had bilaterally choked optic disks, with "cotton wool" areas of exudate on the temporal sides of both disks, and edema of both macular regions. Usually, when there is definite sclerosis of the eyegrounds, it is too late to obtain a good operative result.

In all persons with hypertension the urological tract should be thoroughly investigated. Urinalysis should be done. Kidney function tests should be performed. Intravenous pyelograms should be taken. If these are all negative, cystoscopy with catheterization of both ureters should be done. Urinalysis and cultures of the urine obtained from both kidneys should be run. The function of each kidney should be determined by means of the phenol red test. Retrograde pyelography should be performed if intravenous pyelography has not given the necessary information.

Pyelitis and pyelonephritis of pregnancy are not contra-indications for cystoscopy. Loss of the fetus is much more common in women who have not had necessary renal pelvic drainage than in those who have had pelvic drainage re-established by the ureteral catheter, and further, the development of benign or malignant hypertension may be prevented in many cases.

Hypertension in children is sometimes associated with abnormalities of the upper urinary system. Bothe (26) has published a report of two patients. One child had hydronephrosis of one kidney with extensive pressure destruction of that kidney's parenchyma caused by constriction by an aberrant vessel at the ureteropelvic junction. The previously recorded hypertension was brought to normal pressure by nephrectomy. Four and one-half years after operation the pressure had remained normal. The other child had a preoperative blood pressure of 174mm. of mercury systolic, and 120mm. of mercury diastolic. There was a constriction of the ureter on the left side at the vesical end of the ureter. This pinpoint ureteral opening was dilated with reduction in the blood pressure.

Five cases of unilateral pyelonephritis with hypertension in children under fourteen years of age have been reported as becoming normotensive following removal of the diseased kidney.

A period of at least two years should pass before one should feel sure that there will be no recurrence of hypertension. I feel that if the systolic reading does stay at normal limits even over a period of two years and the diastolic stays around ninety that patient should be watched over a period of five to ten years because he is potentially hypertensive.

The recent case report of Powers and Murray shows that a child with high pressure associated with pyelonephritis and aplasia of one kidney may be entirely relieved by nephrectomy even though the eyegrounds showed choked disks and "cotton wool" areas of exudate caused by the hypertension.

All children with complaints referable to the genito-urinary tract should be investigated, just as thoroughly as in adults. If the intravenous pyelogram does not give you sufficient data, retrograde pyelography should be performed. It is easy to pass a small cystoscope into a child's bladder, and children do well after the examination.

In 1939 Mulholland (27) gave an excellent paper entitled "Hypertension's Challenge to Urology." In it he states that the dismissal of a patient with the remark, "You have high blood pressure" is an admission of defeat or, what is worse, lack of interest. He is entirely right. That patient should have all of the advantages of modern medical diagnostic and treatment skill to attempt to arrive at a conclusion as to the origin of the high pressure and to eliminate that source by medical or operative endeavor. It is that patient's only chance to rid himself of hypertension before a widespread sclerosis develops.

In conclusion, I wish to emphasize the following:

1. It has recently been brought to our attention that some patients with hypertension may be made normotensive by timely nephrectomy when unilateral kidney disease is the source of the high pressure.

2. There are diseases of the kidney and many types of obstructive uropathy which can cause hypertension.

3. All patients with hypertension should be thoroughly examined urologically early in the disease to determine whether or not the source of the elevated pressure is in the urinary tract, and whether that source can be eliminated.

4. Children can develop hypertension with as severe symptoms and as rapid fatal termination as adults. They may be examined easily urologically.

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COMMUNIQUE

Southwark Station,
Philadelphia, Pa.

To the Editor:

In all of my issues of the Arkansas Medical Journal I have been noticing items about promotions for the doctors in service. Therefore, I assume that it is fitting and proper that I should put in my bit, and say that I was promoted to Captain as of Nov. 28, 1942.

I am still with the Coast Artillery unit that I entered the service with in May. At the present time we are getting a lot of limited service men that are handicapped physically, mentally, or from over age. Believe me they certainly keep the medics busy as they are worse to complain than a bunch of sexually dissatisfied women.

Our commanding officer is Col. H. A. McMorrow. He tells me he used to be with the National Guard service stationed at Fayetteville, and that he used to come to Fort Smith to inspect the guard unit there of which you were Regimental Surgeon. I think at that time he was Captain McMorrow.

Regards to all the men who are carrying the load on the home front.

Faternally,
O. B. Barger, Capt., M. C.

TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

INFORMATION from countries in the war area regarding present health conditions is limited and unsatisfactory. In certain European countries extreme hardship is being undergone, due especially to nutritional inadequacies. Evidences are already appearing that a sharp rise in tuberculosis encountered during the last war may again be expected, and with increasing severity. Although the death rate from tuberculosis in the United States showed its usual decline last year, increasing effort must be made to maintain this favorable situation.

TUBERCULOSIS AND THE WAR—HERE AND ABROAD

The United States

The world conflict of 1914-18 for the first time revealed tuberculosis as a major problem. From the early discovery of large numbers of tuberculous troops in the French army to the final assemblage of mortality record of the war years in the civilian population of all countries engaged, it was evident that tuberculosis was exacting a great toll, unrecognized in the wars of previous years. There is every reason to believe, however, that long wars accompanied by privation have always led to increase in tuberculosis. Crowding, malnutrition, exposure to infection and hardship of every sort have been considered responsible in different degree.

Fortunately, a quarter of a century of research since the last World War has led to a better understanding of methods for control of tuberculosis. Countries fearing the ultimate outbreak of hostilities, through the tense years preceding their final advent, anticipated tuberculosis as a grave menace and prepared accordingly. But in spite of forewarning and preparation, a rise in tuberculosis mortality rates appears already evident. Modern war is total war. Whole populations are engaged, through accelerated industry as well as actual combat.

In the present World War increasing effort is being made in the United States to avoid induction of soldiers with tuberculosis. Measures ensuring X-ray examination of practically all recruits admitted to the armed forces are in effect.

In the civilian population precautions are being taken against nutritional deficiency, since it is al-

most universally believed to have important bearing on the problem of resistance to tuberculosis. However, malnutrition may not be the gravest predisposing factor in a rise of tuberculosis. The acceleration of industry, leading to crowded quarters in industrial districts, brought about by the mass migration to industrial centers, has created another opportunity for wide-spread infection.

It is evident that a grave menace exists of another world-wide recrudescence of tuberculosis. Its prevention will require vigorous effort against the spread of infection and all measures possible to maintain a high level of resistance to disease.

War and Tuberculosis, Esmond R. Long, *Amer. Rev. of Tuber.*, June, 1942.

Britain

To what extent the tubercle bacillus will repeat its former triumph of a generation ago in Britain cannot yet be properly gauged, but it has taken the initiative and the future course of events will be greatly determined by the effort put forward now by tuberculosis workers.

Deaths from respiratory tuberculosis increased about 6 per cent the first year of the war and 10 per cent the second, while the increase in deaths from other forms of tuberculosis was 2.4 per cent the first year and 17.6 per cent the second.

A considerable amount of infection is evidenced among the general population, particularly children, which means that either the infecting dose is large, or the resistance low. Both causes may have operated in the first half of 1941 when the nightly bombing of towns and

cities made contact infection probable and frequent. However, if the increase is found to have continued since more normal conditions have prevailed, it will strengthen the idea that there has been a general lowered resistance to infection in children under five. Many factors can have contributed to the lowering of resistance in children among which are change in diet, non-pasteurized milk, blackout and shelter conditions and lack of sleep and rest.

Comparing the trend of events during the first three years of the last war and available figures for World War II, a definite similarity can be traced, although living conditions now are probably more conducive to the spread of tuberculosis. However, there are some marked differences. Tuberculous meningitis has increased sharply, whereas in the corresponding period of the last war it fell almost to the pre-war level. A further point of difference is the small variation between the male and female curves.

These are ominous signs which mean that infection is lurking in hidden places taking its toll, especially in infant lives, and which emphasize the urgency of means for discovering these nests of infection and the need for their adequate control.

A Further Review of Tuberculosis in Wartime, F. Heaf and L. Rusby, *Tubercle*, May, 1942.

France

Food rationing started throughout France on October 1, 1940, when the following foods were restricted: bread, meat, cheese, fats, sugar, milk, chocolate and milled products. Technically other foods could be obtained, but in reality it was difficult to get them. The results of a survey carried on by the Institut des Recherches d'Hygiene on how different families of Paris were feeding themselves showed a total caloric insufficiency of about a thousand calories daily, a calcium deficiency and a calcium-phosphorus imbalance and an insufficient intake of Vitamin A.

Undoubtedly morbidity and mortality from tuberculosis have noticeably increased in Paris. The percentage of rapidly-developed tuberculosis has gone up in an alarming manner. Comparing the figures of the first six months of 1941 with the corresponding ones in 1939, the mortality from tuberculosis increased 10 per cent.

Four basic diets were prescribed for sick persons in four specific categories. To lessen the ill effects upon persons with active tuberculosis and known lesions, a diet was given which corresponded to their general category, plus a supplementary amount of 45 grams of meat and 15

grams of fat daily per patient. Despite the precaution indicated, the march of tuberculosis up to October, 1941, had been ominously progressive; thus if the present dietary regime continues and the consequences increase, the problem of tuberculosis in France will be exceedingly grave.

Food Rationing and Mortality in Paris, 1940-41, Ramon F. Minoli, *Milbank Memorial Fund Quarterly*, July, 1942.

Canada

The fall in the death rate from tuberculosis in Canada, which has been so evident for the past quarter of a century, has occasioned in some quarters a false sense of security. Nothing could be more unsound or misleading. A disease that kills nearly 6,000 of the population, leaves at least 30,000 incapacitated, and costs the country directly at least \$8,000,000, annually, is still a formidable enemy and a major public health problem.

If control of tuberculosis is to be maintained in wartime, tuberculosis services must be continued, problems that arise as a result of the war must be attacked and advantage taken of wartime case-finding projects. Case finding has kept ahead of treatment facilities, which have been inadequate, and until both are developed to a greater degree, control of tuberculosis is still hidden in the future.

Two of the most important phases of case-finding services available are (1) for the general practitioners to provide an early diagnosis, since this is still the greatest source of cases, and (2) examination of contacts, the next greatest source.

Two opportunities have presented themselves as a result of the war: the X-ray examination of all recruits for the armed forces and case-finding projects among industrial workers, particularly in war industries. Tuberculosis is two and a half times as great in industry as in the general population. Therefore, the control of tuberculosis is an important phase of industrial hygiene.

Emphasis is being placed on retaining the open case of tuberculosis in sanatoria. Every patient who leaves against advice represents a weakness in the tuberculosis control system. The factors involved should be carefully analyzed and every way possible must be sought to remedy conditions in institutions to offset this failure in efficient segregation.

The Control of Tuberculosis in Wartime, G. J. Wherrett, *Can. Public Health Jour.*, September, 1942.

COMING MEDICAL MEETINGS

Fifth Councilor District Medical Society, El Dorado, January 5th.

The President's Page

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THE FUTURE—IMMEDIATE AND REMOTE

As we arrive at the close of a year and look forward to the coming year we like to contemplate as to what the future may hold in store.

Arkansas medicine is proud of its patriotic contribution to the armed forces during the past year. Around 250 Arkansas physicians have gone into the armed services. We have exceeded the quota which we were asked to raise. Quite a number of states have gone over their quotas, but California, New York, Massachusetts, Illinois and Connecticut have only contributed from 78% to 82% of their quotas. Surely these latter states should do equally as well before asking Arkansas and other states to again contribute physicians.

As to the remote future, it is interesting to note the recent statement of the personal physician to President Roosevelt. I refer to the statement of Surgeon-General Ross T. McIntire of the Navy: "When this war is over, our doctors are coming back to this country. There will be thousands and thousands who will go back into civil life, because the Army and Navy will shrink, as they should, but I hope never to the point they did before. These men are coming back with an entirely different slant on a lot of things. I think we must be careful that they do not come back with the idea that they can practice only one form of medicine. Specialization. . . ."

"That brings me," he said, "to the point of the cost of medical and hospital care. I hope the time never comes when the practice of medicine, or anything that has to do with it, has to come under government control. I think it would be a disaster to this country; it would be a disaster to medicine."

Surgeon-General McIntire challenges us to do our own thinking about the future and not allow organizations that are not competent to dictate to us. He states "we can lead the band down the right street and out of a blind alley" if we will.

It is heartening to note these statements of one of our medical leaders who is so intimately associated with our President.

In closing, may I wish for all of you a year of health and a year of splendid service to our country, whether it be in military life or civilian life.

R. B. ROBINS, President.

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EDITORIALS

ANNUAL CONFERENCE OF SECRETARIES AND EDITORS

The annual conference of state society secretaries and editors was held in Chicago, November 20th and 21st. This has always been an especially valuable meeting for the representatives of the component state societies and the action of the Board of Trustees of the American Medical Association in making the meeting possible is appreciated by all state society representatives. The 1942 session was devoted to problems arising out of the war. On November 20th, speakers discussed the activities of the armed forces with particular reference to the part medical men play in an all-out war effort. Surgeon General McIntire of the Navy gave the heartening news that the mortality of the wounded transported from the initial engagements in the Solomon Islands was less than 1%. He deplored governmental control of medicine but urged the profession to start constructive planning for the post-war period. General Charles C. Hillman, of Arkansas, representing the Surgeon General of the Army, stated that there

were now on duty in the Army Medical Corps nearly 36,000 physicians, described their training and called attention to the work being done by members of the Medical Administrative Corps to relieve physicians in administrative fields. Director Frank H. Lahey, of the Procurement and Assignment Service, discussed the activities of the Committee and said that states exceeding their quotas for physicians in the armed forces during 1942 would be given credit on their 1943 quotas. Thus, Arkansas will be called upon to furnish fewer physicians in 1943 than would have been required had not an excess number of our physicians volunteered during 1942. The manner in which Portland, Oregon, had handled the medical care problem resulting from a 100% increase in its population was presented. President-Elect James E. Paulin discussed the problem of licensure involved in the relocation of physicians needed for communities where there is a shortage of medical men and suggested a widening of reciprocal agreements and the granting of temporary licenses as an expedient. Surgeon General Thomas A. Parran of the United States Public Health Service reported that 5,700,000 people have migrated into 410 communities, chiefly those areas previously sparsely settled and poorly supplied with physicians. He advocated voluntary redistribution of physicians in place of any compulsory plan. Colonel L. G. Rowntree of Selective Service stated that nervous and mental diseases now stand first in the list of causes for rejection for military service. Secretary Creighton Barker of Connecticut clearly outlined the local problem of maintaining the supply of physicians in the respective states and communities. Better utilization of the physician's time and energy will help in these times and the public should be educated regarding its responsibilities along this line. Walter F. Donaldson of Pennsylvania spoke of the work of the War Participation Committee and stressed the need of a plan for industrial health. On November 21st, Mr. A. M. Simons, of the American Medical Association staff, explained the various plans and operations of the Farm Security Administration and said that all agreed that the contract should be fully understood and that too much service must not be attempted. The medical service plan operated in Massachusetts was described by James C. McCann. The final presentation was by Carl M. Peterson, of the American Medical Association staff, who urged that county medical societies recognize the problem of the medical needs of industry and cooperate in keeping workers at a high level of efficiency. The

annual editor's dinner was addressed by Julian Price of South Carolina in a critical, careful analysis of the various state medical journals.

INDUSTRIAL HEALTH

The all-out war effort has brought an increasing appreciation of the responsibility of the industrial surgeon to Arkansas. There are peculiar situations involved in industrial surgery whereby the physician immediately involves himself in a series of relationships going far beyond the usual patient-physician relationship as it exists in private practice. The physician becomes at once, judge, recording secretary and witness. Yet, there is no need to lose the usual patient-physician relationship. Such a relationship requires cooperation and confidence on the part of the injured employee, and knowledge, skill, honesty and sympathy on the part of the physician. Accurate records are vital in industry. Well-kept records avoid discussions and simplify bookkeeping for the physician. The detection and prevention of hazards arising in the course of specific employment or in specific industry should challenge the scientific physician.

There is need for industrial medicine and surgery of the highest type in all of Arkansas industries. The Committee on Industrial Health has asked the county medical societies to give emphasis to a study of industrial medicine, to evolve plans whereby industry in their communities may benefit from the knowledge and skill of scientific medicine. The problem is one of utmost interest to industry, to the employee, and to the individual physician. Special effort should be made during 1943 to contribute in a substantial manner toward the solution of the medical and surgical problems of Arkansas industry.

THE HOME JOB

Patriotic physicians from Arkansas volunteered in excess of the quota assigned by the armed forces during 1942. This is a source of gratification to these men who have heeded their country's call as well as to the entire citizenship of the state and to those of the medical profession who remain behind.

The departure of these physicians from their civilian spheres of activity places a definite and large responsibility upon their colleagues who remain at home. It is our stewardship that we maintain the ideals of medicine and that we have ready for their return a medical organization

ready and willing to serve the people in an even better way than we now know.

First of all, it is our duty to see that no ill person in Arkansas goes without medical care. There must be no criticism on the home front that medicine is unable to furnish needed and required medical care. Such criticism immediately suggests the need for governmental supervision of the practice of medicine. To fulfill this trust to our colleagues in service will require more work, longer hours and the fullest devotion to duty. There is no doubt but that it can and will be done.

County medical societies must meet. Regardless of increased work, there must be regular meetings, stimulation of knowledge, and a focusing of all thought upon the future. Radical economic changes are certain to follow the eventual victory of the United Nations.

There can be no real victory for democracy if the time-tested principles of medical care are surrendered at home. County medical leadership of the highest type is needed. It must be active. It must give consideration to the local, as well as to state and national, problems of the provision of medical care. There must be diligent and far-seeing study of changes which would improve and better our present system of medical care.

These are among our duties.

EDITORIAL COMMENT

DISLOCATION FOR CIVILIAN PRACTICE

The Directing Board, Procurement and Assignment Service, has asked that the following statement be published. Physicians in Arkansas who may wish to so participate in the war effort are requested to immediately advise the state chairman, 610 First National Bank Building, Fort Smith.

"It is of the utmost importance that the Procurement and Assignment Service for Physicians, Dentists and Veterinarians, immediately has the name of any doctor who really is willing to be dislocated for service, either in industry or in over-populated areas, and who has not been declared essential to his present locality. This is necessary if the medical profession is to be able to meet these needs adequately and promptly. We urgently request that any physician over the age of 45 who wishes to participate in the war effort send in his name to the State Chairman for the Procurement and Assignment Service in his state."

PROCEEDINGS OF SOCIETIES

Announcement is made the Section of Eye, Ear, Nose and Throat will not hold its usual session during the 1943 annual meeting of the Society.

Sevier County Medical Society has elected the following officers: President, J. S. Hendricks; Vice-President, C. A. Archer; Secretary-Treasurer, C. E. Kitchens; Delegate, R. C. Dickinson, and Alternate, C. E. Kitchens.

Lawrence County Medical Society has elected the following officers: President, W. W. Hatcher; Vice-President, J. A. Martin; Secretary-Treasurer, Chas. D. Tibbels; Censor, T. C. Guthrie, and Delegate, J. C. Land.

Benton County Medical Society has elected the following officers: President, A. L. Peacock, Gentry; Vice-President, A. J. Harrison, Springdale, and Secretary-Treasurer, Geo. M. Love, Rogers.

Franklin County Medical Society has elected the following officers: President, W. C. Porter; Vice-President, E. W. Pillstrom; Secretary-Treasurer, W. H. Gibbons; Delegate, W. H. Bollinger, and Alternate, W. C. Porter.

The Garland County Medical Society has elected the following officers: President, G. C. Coffey; Vice-President, L. E. Reed; Secretary-Treasurer, W. E. Gray; Delegates, J. M. Proctor, Foster Jarrell and H. King Wade, and Alternates, J. S. Stell, A. H. Tribble and D. B. Stough.

W. E. Gray, Secretary.

The Craighead-Poinsett County Medical Society met December 3rd electing the following officers: President, O. T. Cohen, Jonesboro; Vice-President, H. H. McAdams, Jonesboro; Censor, Ira W. Ellis, Monette, and Secretary-Treasurer, J. H. McCurry, Cash. The Society presented Drs. H. A. Stroud and L. H. McDaniel desk radios in appreciation of services rendered the Society.

J. H. McCurry, Secretary.

The Ninth Councilor District Medical Society met at Harrison December 2nd. Following luncheon, the scientific program was presented: "Abortion, Miscarriage, Missed-Abortion," M. E. McCaskill; "Industrial Injuries," Jos. F. Shuffield; "Neurological Considerations in General Practice," Robert Watson; "Common Eye Diseases

and Their Treatment," W. J. Schwarz, and "Selective Service Medical Examinations," Comdr. H. A. Higgins, all speakers of Little Rock. The Society will next meet in Harrison.

The Sebastian County Medical Society was addressed December 8th by Capt. H. C. Gahagan, Camp Chaffee, on "Urology in the Army." The following officers were elected: President, Chas. T. Chamberlain; Vice-President, B. L. Ware; Secretary, W. F. Adams, and Treasurer, W. R. Brooksher.

W. F. Adams, Secretary.

The Ouachita County Medical Society met in regular monthly session December 3rd at the Camden Hospital. A movie entitled "Peptic Ulcer" furnished by John Wyeth and Company was shown. The following new officers were elected: President, T. E. Rhine, Thornton; Vice-President, Rowland R. Robins, Camden; Secretary, R. B. Robins, Camden; Delegate, S. A. Thompson, Camden, and Alternate, J. P. Clemens, Stephens.

R. B. Robins, Secretary.

Polk County Medical Society has elected the following officers: President, Pierre Redman; Vice-President, J. Q. McElroy; Secretary-Treasurer, E. M. Miers; Delegate, B. H. Hawkins, and Alternate, Pierre Redman.

Independence County Medical Society has elected the following officers: President, M. S. Craig; Vice-President, V. D. McAdams; Secretary-Treasurer, W. J. Ketz; Delegate, W. J. Ketz, and Alternate, O. J. T. Johnston. The Society has paid the 1943 assessment of its seven members who are now in the armed forces.

W. J. Ketz, Secretary.

The Miller-Bowie County Medical Society was addressed December 18th by R. L. Sanders, Memphis, on "The Management of Surgical Diseases of the Colon."

H. K. Abrams, Secretary.

Mississippi County Medical Society has elected the following officers: President, T. F. Hudson; Vice-President, F. L. Husbands, and Secretary-Treasurer, M. L. Skaller.

Searcy County Medical Society has elected the following officers: President, J. O. Leslie, Marshall; Vice-President, E. G. Fendley, Leslie; Secretary-Treasurer, Sam G. Daniel; Delegate,

J. O. Leslie, and Alternate, E. G. Fendley. The Society reported a fully-paid membership on December 21st, 1942.

Sam G. Daniel, Secretary.

As of December 18th, the Franklin and Ouachita County Medical Societies had reported fully-paid membership assessments for 1943.

The Southeast Arkansas Medical Society met in dinner session at Monticello December 21st for a program on the medical aspects of chemical warfare by Fred W. Harris and R. T. Smith, Little Rock.

Hempstead County Medical Society has elected the following officers: President, Don Smith; Vice-President, J. E. Gentry; Secretary-Treasurer, H. G. Heller; Delegate, J. G. Martindale, and Alternate, J. E. Gentry. The Society reported a fully-paid membership for 1943 on December 19th.

White County Medical Society has elected the following officers: President, Geo. C. Burton, Bald Knob; Vice-President, A. H. Hudgins, Searcy; Secretary-Treasurer, S. J. Allbright, Searcy; Delegate, Geo. C. Burton, and Alternate, M. C. Hawkins, Jr., Searcy.

Faulkner County Medical Society has elected the following officers: President, Tom Mabry, Vilonia; Vice-President, J. H. Downs, Vilonia; Secretary-Treasurer, I. N. McCollum, Conway; Delegate, N. E. Fraser, Conway, and Alternate, C. H. Dickerson, Conway. The Society reported a fully-paid membership for 1943 on December 22nd, 1942.

I. N. McCollum, Secretary.

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PERSONALS AND NEWS ITEMS

H. H. Holt, Hope, has been called to active duty as Lieutenant, Medical Corps Reserve, and assigned to duty with the 147th Station Hospital, Camp Harrihan, Louisiana.

Lieut. J. Q. Blackwood, formerly of Helena, has been transferred to Greensboro, North Carolina.

Vincent O. Lesh, Fayetteville, has been appointed Captain, Medical Corps, Army of the United States, and assigned to Station Hospital, Fort Bliss, Texas.

Alfred H. Hathcock, Fayetteville, has been appointed Captain, Medical Corps, Army of the United States, and assigned to Fort Sam Houston, Texas.

A. H. Hudgins has moved from Jonesboro to Searcy.

Paul T. Stroud, Jonesboro, has been appointed Lieutenant (j. g.) Medical Corps, Naval Reserve, and called to active duty at Naval Training School, Norman, Oklahoma.

W. M. Woods, Huntington, has been promoted to Captain, Medical Corps, and is now assigned to duty overseas with an aviation unit.

Perry J. Dalton, Camden, has been assigned for duty at the Naval Hospital, San Diego, California.

Lyle L. Hassell, Blytheville, has been called to duty as Lieutenant, Army Medical Corps, and assigned to Station Hospital, Fort Bliss, Texas.

Capt. W. L. Shippey, Fort Smith, is now stationed with the 112th Station Hospital, Fort Jackson, South Carolina.

Major Fount Richardson, Fayetteville, is now stationed with the 97th Station Hospital overseas.

Thos. G. Price, Wynne, has been called to active duty as Lieutenant (j. g.), Medical Corps, U. S. N. R., and assigned to 1st Corps Motor Transport Battalion, Camp Linda Vista, San Diego, California.

RANDOM THOUGHTS OF THE SECRETARY

November 18th. We get an "A" at school today with the least amount of work ever (we can prove that once before we got an "A" in school).

November 20th. Listening to a most profitable program with the secretaries and editors in Chicago today, impressed as ever with the knowledge of details which Indiana's Shanklin retains but somewhat surprised to hear that he has returned to the custom of barter in payment for medical services. Wyoming's Keith speaks of Grayson and thinks Arkansas' health officer can get most anything he wants. We did not make comment on the obstetric and pediatric program as it now exists. Tonight the editors and all others at the conference dine and Price, from South Carolina, reports on much study of medical journals with a critical analysis of their faults, and, with good technic, mentions some commendable features which they possess. Should any of our readers wish to know which features were commended, we shall be happy to furnish the name of one on request.

November 21st. Repeatedly postponed, this afternoon's Chicago-Kansas City flight is finally cancelled, showing the desirability of our obtaining rail and Pullman transportation as well. So aboard the Santa Fe tonight, affording the opportunity to talk things over with Holman Taylor until bedtime.

November 22nd. Riding the Southern Belle all day long, again reminded that of all the railroad stations we have seen, Joplin's Union Station appears most empty and desolate.

November 24th. Comes the story of the asylum inmate who had a fixation on using a sling shot to break all the window panes in town, much build-up to a fast let-down.

November 26th. Giving fervent thanks for the American way of life we are privileged to live; for the knowledge that we still have the courage demonstrated at Bunker Hill, San Juan and Saint Mihiel; for the blessings with which our God has endowed us.

December 2nd. Heading for Harrison this morning, passing through Fayetteville at dawn, picking up the somnolent McNeil at his home and then jointly seeking alarm clocks as an enterprise, an activity which Clyde abandons at Green Forest. The havoc wrought by Berryville's tornado is disturbing and we wonder at the fortitude these good people must have displayed when such a disaster struck in the night. As always, we hear of the courage of the doctor and are happy that we can know such men. In Harrison, we enjoy again a White House meal, confirming Duncan Hines' judgment in this selection. The scientific session is one of the most interesting this group has presented and the questions from the audience testify to the general appreciation. Homeward in an uneventful manner with dinner in Rogers where Clyde tries unsuccessfully to peddle one of our clocks at a goodly profit.

December 4th. Comes the latest definition of a "sissy" as the man who resigns from the rationing board and joins the commandos.

December 14th. Three telephone calls testify that procurement and assignment is once again "snafu."

December 18th. Comes Bill Stover's Christmas card which we predict will cause more excitement and conversation than did H. B. 84.

December 21st. We encounter many difficulties in our efforts to get to Monticello tonight for the Southeast Arkansas Medical Society meeting, but it shall not be said that we did not try. After these experiences, we readily agree with Mr. Eastman in advising all of you to stay at home this holiday season.

OBITUARY

CHARLES A. LUMSDEN, age 64, of DeWitt, died October 27th. Born in Cartersville, Missouri, February 6th, 1878, he had lived in Arkansas county for 50 years. A graduate of the University of Arkansas School of Medicine in 1912, he had practiced at DeWitt for many years. He was a member of the Methodist church. Surviving relatives are his wife and a son.

G. MAX WATKINS, age 69, died at his home in Walnut Ridge November 29th. Born at Richwoods, Lawrence county, he graduated from Memphis Hospital Medical College in 1909. During the World War I he served as Major, Medical Corps. Surviving relatives are his wife, two sons and four daughters.

CHARLES E. BAYAN, age 57, of Chester, died in a Fayetteville hospital November 27th. Born in Houston, Missouri, he had practiced in Crawford county for many years. In addition to his membership in the Crawford County Medical Society and the Arkansas Medical Society, he was a member of the Masonic lodge. Surviving relatives are his wife and a son.

JAMES T. POWELL, age 79, died at his home in Gravette October 28th. Born in Benton county he taught school after attending Pea Ridge Masonic College and graduated from the Medico-Chirurgical College of Kansas City in 1903. In addition to his membership in the Benton County Medical Society, of which he had been an officer on several occasions, he was a member of the Arkansas Medical Society and of the Masonic lodge. Surviving relatives are his wife, a son and two daughters.

WOMEN'S AUXILIARY NEWS

PRESIDENT'S MESSAGE

Dear Auxiliary Members:

As the Christmas season draws near, I find myself taking stock of Auxiliary work. My personal inventory is very small. I am sure that each county Auxiliary feels the same as I do, in that we have not been able to accomplish all that we had hoped, but we have served in some war work that is to the best interest to the medical profession. Auxiliary members over the entire state are doing war work. At all surgical dressing tables, you can find a group of doctor's wives. In many instances, doctor's wives are directing the work in these rooms.

A thing that has impressed me most is that county Auxiliary presidents write: "As an Auxiliary, we are at least carrying on in Red Cross rooms and all phases of war work." It is gratifying to note that not one county Auxiliary has dropped the organization for the duration. The Auxiliary is such a well established organization that it can and will survive even a war.

Since national and state Auxiliaries have voted to waive the dues of all members whose husbands are in the armed forces, it is most important for the others to pay our dues early this year. The budget will be smaller and will require more time and thought.

At a Christmas season when a cloud of darkness hovers over us all, to say I wish for you each "A Merry Christmas and a Happy New Year," sounds empty and futile. But in this world of darkness, may the "Star of Bethlehem" shine brighter in your own life and guide your loved ones away from home. And may the New Year bring Peace—lasting Peace to you and the whole world!

Cordially yours,

MRS. L. G. FINCHER,

President of the Auxiliary to the
Arkansas Medical Society.

RESOLUTIONS OF RESPECT

In Memory of

DR. JAMES T. POWELL

Who Died October 28th, 1942

Once again death hath summoned a beloved member, and the golden gateway to the Eternal City has opened with a welcome to home. The work of ministering to the wants of the afflicted, in shedding light into darkened souls and in bringing joy into the places of misery is completed, and as a reward has received the plaudit, "well done," from the Supreme Master.

AND WHEREAS, The Allwise and Merciful Master has called our beloved and respected member home;

AND WHEREAS, Having been true and faithful member of our organization, therefore, be it

RESOLVED, By the Benton County Medical Society in testimony of its loss, that we tender to the family of our deceased member our sincere condolence in their deep affliction and that a copy of these resolutions be sent to the family.

J. S. THOMPSON, President,

C. S. WILSON,

GEO. M. LOVE, Secretary,
Committee.

COMMUNIQUE

November 16th, 1942.

To the Editor:

Just a few lines to let you know I am still kicking. I arrived here in * * * on November 8th, 1942, with my regiment which was among the first to arrive in this sector and we captured the city of * * * which ended the war. It was our first test and we did all that was expected of us and a little more. The medical service of all the combat troops was very good.

This is a swell country, like Arkansas in the spring. Warm days and cool nights. Plenty of good citrus fruits.

I am too busy now to make this more than a note so I shall close by wishing all in the Arkansas Medical Society, a Merry Christmas and a Very Happy New Year.

John M. Samuel,

Major, 13th Armored Regiment,
APO 251, c/o Postmaster,
New York, New York.

COMMUNIQUE

December 11, 1942.

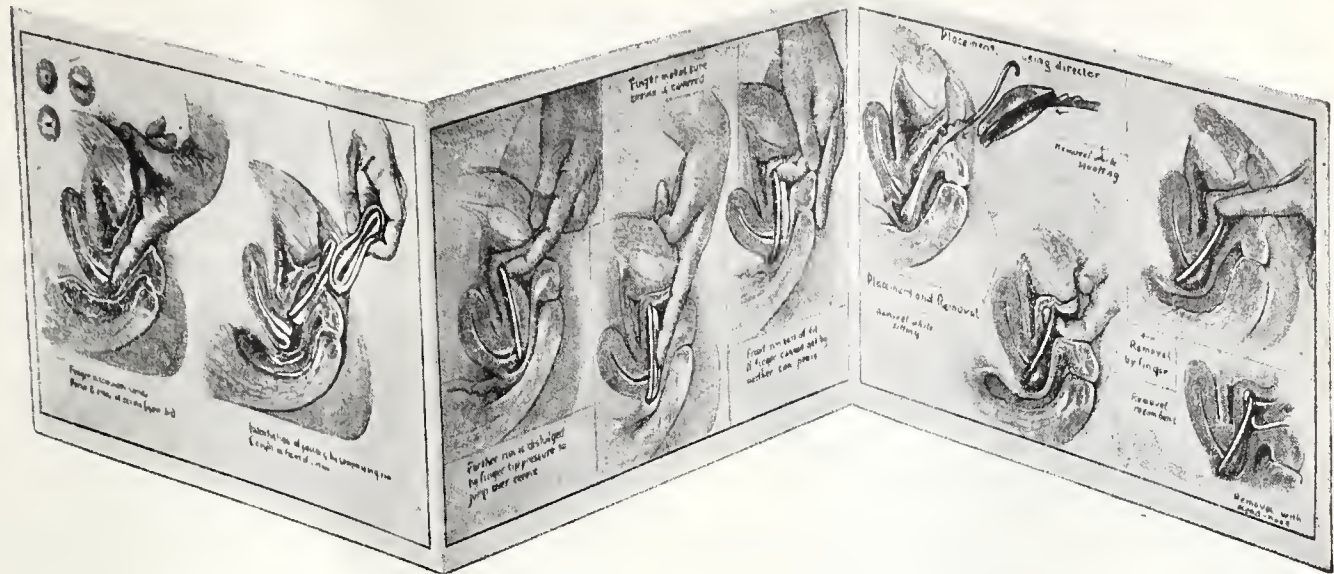
To the Editor:

Noticing my demise, together with that of several other members of the Sebastian County Medical Society, this communique from the battle of Corpus Christi will be of the nature of a ghost story.

Harvey Shipp and I are still here. Either we indoctrinate slowly, or else we have perfected such a splendid technique for indoctrinating others that they are keeping us on strictly for this purpose, as practically all the new arrivals are shipped out in about three weeks after coming on board. I strongly suspect, however, that it is the former because I am still unable, without conscious effort, to call a floor the deck, or the wall a bulkhead.

As perhaps you already know McLochlin, of Little Rock, a former shipmate of Calcote, Shipp and myself, was medical officer on * * *, recently torpedoed off * * *. We have heard that he is safe and back in the United States.

Joe Bounds will be due back here shortly from Philadelphia where he has been taking special work in psychiatry. Jack Agar reports that he arrived safely in San Diego with one suit; the rest of his wardrobe having gone aground somewhere in official channels via which it was being forwarded. A letter from Vincent Lesh states that he is at Camp Bliss, and that Hathcock and



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several others are at Fort Sam Houston. Jim Lewis is at Camp Elliott with the Marines.

Well, the time for our annual Sebastian County banquet is rapidly approaching and it makes me homesick not to be able to attend. The 29th of this month marks the end of my first year here and I am an old hand. Since it is fifteen minutes to chow, I must knock off and get over there because I have learned long ago that bodily presence has precedence over seniority when it comes to getting the thickest and leanest piece of meat.

With best wishes for a very Merry Christmas and a most Happy New Year.

Sincerely,

Fred H. Krock,

Lt. Comdr., U. S. N. R.

COMMUNIQUE

Army Air Field,
Eagle Pass, Texas,
December 10, 1942.

To the Editor:

I have been transferred from Tyler, Texas, to the cactus plains of south Texas. It is a very nice place and is growing fast. It is a new field just opened. I like it fine but there is not a place for the family within 60 miles.

I have been here three nights and have been across the river two of them. "Not bad," either, and you can get all the "gasoline" over there you need.

Please send The Journal here.

Give my regards to all the fellows back in Arkansas.

With best personal regards and a wish for a Merry Christmas and a Happy New Year.

Sincerely,

James M. Kolb, Capt., M. C.,
Flight Surgeon.

COMMUNIQUE

Navy 1220,
Fleet Postoffice,
San Francisco,
Nov. 16, 1942.

To the Editor:

Just a reminder that the Arkansas Medical Journal does not reach me and consequently when my confreres discuss the latest advances in the world, I am not able to contribute in the same erudite manner as when I was a regular reader of The Journal. So much for that line of thought.

Am doing beautifully in the role of Dr. Livingston but will admit the war has caused me certain inconveniences and has further caused me to deviate from my normal routine in many ways which, I can assure you, I will relate in great detail after our first meeting. I will be able to talk longer and more than Chamberlain—and truthfully.

My friends are doing very little toward keeping up my morale with letters. It seems that the most verbose of my friends, namely, Brooksher, Chamberlain and Wolfermann, could spare a few words for a friend who is now a combination Boy Scout and backwoods surgeon. Besides, if you don't write I won't let any of you in on all of the newer concepts of traumatic surgery.

Please do drop me a line and tell me all the news of the local profession (and anything else you might know).

Regards,

T. P. Foltz, Lt., M. C.

COMMUNIQUE

Hensley Field,
Grand Prairie, Texas,
December 18, 1942.

To the Editor:

Am enjoying The Journal way down here in Texas.

Ellis P. Cope,
Capt., M. C.

COMMUNIQUE

Roswell, New Mexico
Nov. 23, 1942

To the Editor:

Still here but busy. Enjoy The Journal.

L. D. Massey, Major, M. C.

Station Hospital,
Fort Bliss, Texas

November 25th, 1942

To the Editor:

Have been in the army since the 11th. Spent about ten days at Fort Sam Houston before being assigned here. This place is much superior to my idea of the average for the army. The personnel seem very nice. I have been assigned to the Out-Patient Clinic. There are five of us on that service. Please send my copy of The Journal here.

Very truly yours,

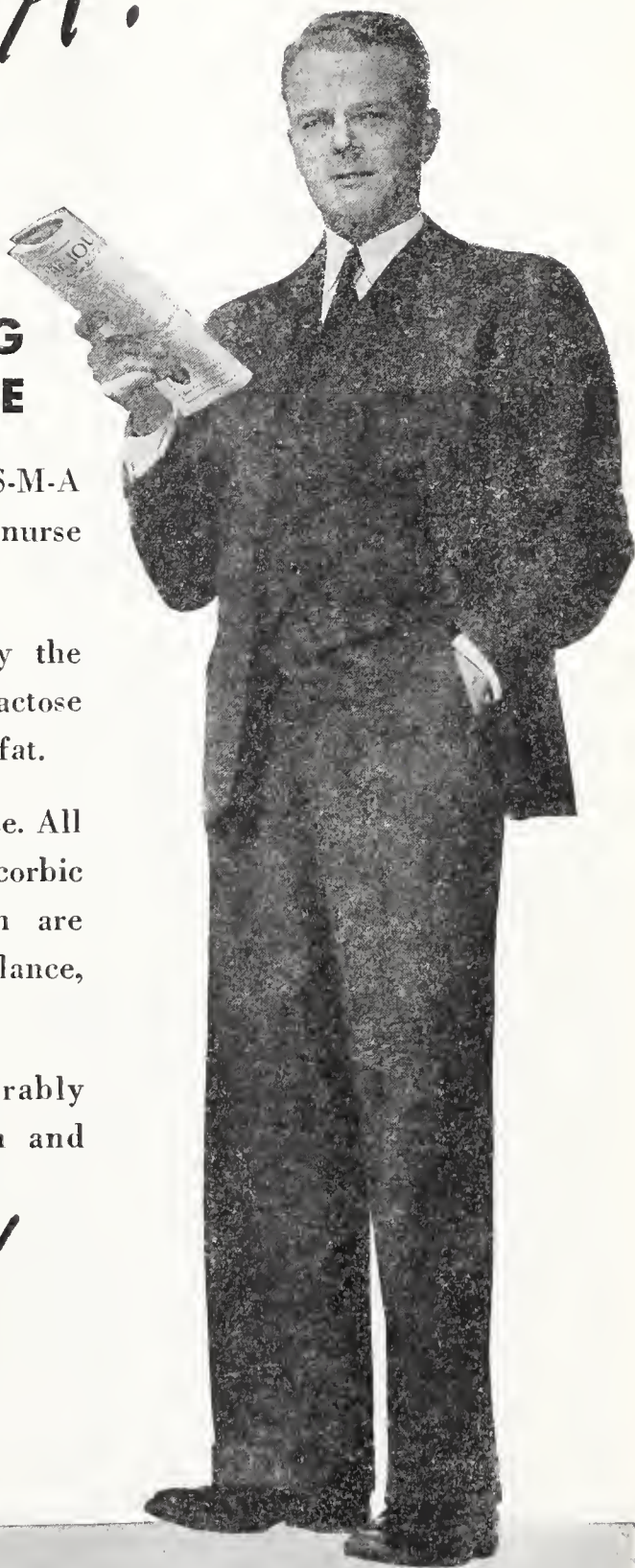
Vincent O. Lesh, Capt. M. C.

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BOOK REVIEWS

Military Surgical Manuals, Volume III—Abdominal and Genito-Urinary Injuries: Prepared under the auspices of the Committee on Surgery of the Division of Medical Sciences of the National Research Council. 243 pages with 79 illustrations. Philadelphia and London: W. B. Saunders Company, 1942. Price \$3.00.

In this book, the author presents in compact form essential up-to-date and reliable information that will be highly valuable to any physician engaged either in private practice or in the military service.

The symptoms, diagnosis, complications and treatment for various types of injuries and infections of the abdominal viscera and the genito-urinary tract are not only concisely discussed but are also illustrated by excellent diagrams.

This little book is well written and is very interesting to read.

Mental Illness: A Guide for the Family: By Edith M. Stern, with the collaboration of Samuel W. Hamilton, M. D. Price \$1.00. 134 pages. New York: The Commonwealth Fund; London: Oxford University Press, 1942.

In the words of Dr. George S. Stevenson, Medical Director, National Committee for Mental Hygiene, "Here is a book to be read and re-read when mental illness strikes. It gives the practical information and guidance that the family needs to have." It will be of untold value in the years to come in alleviating a lot of unnecessary suffering for both mental patients and relatives. When families are bewildered and over-wrought by mental illness of loved ones, this book will give understanding and encouragement. Because of his direct concern with cases of mental illness, this is a book that every doctor could read to his advantage, for he will be the first to discuss the mental case with the family.

Military Medical Manuals—Manual of Dermatology: Issued under the auspices of the Committee on Medicine of the Division of Medical Sciences of the National Research Council by Donald M. Pillsbury, M. D.; Marion B. Sulzberger, M. D.; Clarence S. Livingood, M. D. 421 pages with 109 illustrations. Philadelphia and London: W. B. Saunders Company, 1942. Price \$2.00.

This is another in the series of military medical manuals and principally concerns itself, of course, with the skin conditions common to younger males. The discussions on diagnosis are considered most helpful. Only tried remedies are given. This is a recommended book for medical officers but can well be used in civilian practice.

Surgical Pathology: By William Boyd, M. D., LL. D., M. R. C. P. Ed., F. R. C. P. Lond., Dipl. Psych., F. R. S. C., Professor of Pathology, University of Toronto. Fifth Edition, thoroughly revised. 843 pages with 502 illustrations and 16 colored plates. Philadelphia and London: W. B. Saunders Company, 1942. Price \$10.00.

This edition represents a thorough revision of the previous popular fourth edition, with removal of deadwood and incorporation of new material. A new chapter has been added of Surgical Pathology of the Thorax, and the chapters of the female reproductive system and nervous system have been extensively revised. New subject-matter includes head injuries, wound infections, burns, chronic ulcerative colitis, liver death, bile peritonitis, osteomyelitis of the frontal bone, relationship of unilateral chronic

pyelonephritis and hypertension, and several other new entities. Unfortunately however this new matter for the most part consists of a brief reference to it rather than a sufficiently detailed discussion to be of practical value to the busy surgeon. Even the bibliographies at the ends of chapters are often incomplete in references where further information may be secured by the interested reader. The chief merit of the work is the numerous beautiful illustrations of both gross and microscopic pathology.

The subject-matter is readily readable, and the work will prove valuable as a guide to the surgeon as to what pathological conditions may be encountered, rather than as a detailed reference work.

Food Charts: Foods as Sources of the Dietary Essentials: Prepared by a Joint Committee of the Council on Foods and Nutrition of the American Medical Association and of the Food and Nutrition Board of the National Research Council. Paper. Price 10 cents.* Pp. 20. American Medical Association, Chicago, 1942.

*Quantity prices on request.

Current interest in nutrition is at a high level and the subject merits all the attention which it is receiving. Information about the composition of foods now is on a quantitative basis. A forceful presentation of some facts about foods as sources of the dietary essentials is provided by the present illustrated essay, which has been prepared by a joint committee of the Council on Foods and Nutrition of the American Medical Association and of the Food and Nutrition Board of the National Research Council. There are eight charts showing the contribution that individual foods may make with respect to the needs for protein, calcium, iron, vitamin A, thiamine, riboflavin, nicotinic acid, and ascorbic acid. A feature of these graphic presentations is that the values are presented in terms of the proportion of the daily requirements which are supplied by typical servings of each food. The requirements selected are the Recommended Daily Allowances of the Food and Nutrition Board of the National Research Council. The charts show, for example, that a serving of about 3½ ounces of cooked greens (beet, kale, chard, mustard, spinach, turnip) will supply more than 10,000 International units of pro-vitamin A, the daily allowance of which is 5,000 International units. An orange of average size, or half a grapefruit, or a serving of fresh strawberries will supply the 75 milligrams of ascorbic acid which is considered to be a desirable intake of vitamin C. It is interesting to note the unique value of milk as a source of calcium, protein and riboflavin. There is a descriptive paragraph or two about each of the charts. In addition the booklet reproduces the table of Recommended Dietary Allowances and also provides the values of Minimum Dietary Requirements developed by the Food and Drug Administration for purposes of labeling special dietary foods. This little essay thus provides considerable factual information about foods as sources of the dietary essentials.

Ambassadors in White: The Story of American Tropical Medicine: By Charles M. Wilson. 372 pages. Illustrated. New York: Henry Holt and Company, 1942. Price \$3.50.

In a critical study the author recounts the discoveries and achievements of the physicians and scientists who have worked in our neighboring countries south of the Rio Grande. This is a book with a deservedly popular appeal, especially with the present emphasis upon good will to Latin American republics, and should prove interesting reading to physicians and health workers.

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COMMON HEAD INJURIES

E. M. MIERS, M. D.
Mena

Under this heading I wish to speak of the common cases of injury to the cranium one sees each day. There has been a great increase in head injuries as a result of so many automobile accidents that it behooves the general practitioner as well as the surgeon, to have a clear understanding of the problems involved. Text books have devoted much time to the mechanism by which fractures are produced, yet so little of value to the physician confronted with a case of head injury. For simplicity's sake, we shall attempt to classify the more common types, and enumerate some of the prominent symptoms:

1. Compound fractures of the skull.
2. Simple fracture of one or both tables.
3. Cerebral concussion.
4. Cerebral compression.
5. Cerebral irritation.

Compound fracture of the skull. The diagnosis is comparatively easy in the majority of cases, by both inspection and palpation at the seat of the fracture, if the patient is seen soon after the injury. A fissured fracture can be recognized as a hair-line opening from which blood escapes, these fissures can be followed to the base of the skull. It is impossible to rub the blood away in case of a fracture. In a fissure, one can definitely rub the blood away. The surgical care of these injuries is the same as of lacerated wounds elsewhere in the body: complete debridement, removing all loose fragments that are not attached to the dura. Bones of the skull do not regenerate, except in children and young adults, yet one should not hesitate to remove all bone that is infected. Should infection follow these injuries, especially if the dura is open, a brain abscess or meningitis is almost certain to follow. Torn meninges and brain tissue should likewise be removed. Complete hemostasis is sought. The wound is closed without drainage, as drainage only invites serious complications. Later the

skull defect can be repaired by bone graft. Under this heading we should also consider gunshot fractures, simple fissure fractures caused by high explosives and indirect violence, penetrating fractures, and depressed bone fragments, symptoms due to penetration of the skull itself. The brain injury and injury to the intra-cranial vessels will depend upon the velocity of the missile, the extent of its penetration, and its course after it enters the cranium.

Simple fractures of the external table can be definitely diagnosed as involving this table only, if and when these fragments are removed, the inner table is found absolutely intact. Fractures of the inner table alone are diagnosed by symptoms of the accompanying intra-cranial injury and x-ray. The depression must always be raised. Fracture of the inner or both tables are diagnosed by palpation and x-ray, depression when scalp is opened, by symptoms of compression, eye ground variations, choked disk, disturbances of respiration, motion, blood in cerebro spinal fluid, bleeding from ear, nose or mouth. "In base of the skull fractures bleeding was present in 74 percent and usually from one ear only." The depressed fractures should be operated upon as soon as possible; as soon as a diagnosis is made. Never wait for neurological symptoms to develop. Naturally, if the seat of operation cannot at once be rendered clean or if the patient is in great shock one must wait for the best time to operate. Injury sufficient to cause skull fracture becomes important or serious only if associated with damage to the cranial contents because fracture per se often causes few symptoms and leaves little or no deformity. This fact is clinically so important that the discussion of the entire topic practically resolves itself into two groups of cases, one with and the other without signs of brain or intra-cranial injury. "From 60 to 70 per cent of vault fractures also involve the base. From 80 to 85 per cent of basal fractures are said to originate in the vault."

Cerebral concussion. Concussion symptoms will always appear immediately after injury, naturally varying somewhat in their severity. Con-

cussion is a most dangerous head injury as a patient may die suddenly giving one little time to do anything for him. These can for convenience be divided into:

heart. Respiratory failure comes in all of these cases that die, either with or without spinal puncture.

Cerebral compression may or may not be the

Mild	Severe	More Severe
1. Unconscious only a few seconds or minutes.	1. Unconscious for an hour or longer.	1. Unconscious only a short time followed by death.
2. Vomits a little.	2. Vomiting several times.	2. Perhaps no vomiting.
3. Blood pressure unchanged.	3. Blood pressure unchanged.	3. Blood pressure lower and lower.
4. No pulse change.	4. Pulse rapid.	4. Pulse rapid, weak.
5. Vertigo, tinnitus, mild.	5. Vertigo and tinnitus severe.	5. Same as severe cases.
6. Flashes of light.	6. Pupils are equal and respond to light.	6. Pupils same.
7. No memory of happenings just before accident.	7. Same.	7. Blank.
8. Temperature unchanged.	8. Subnormal.	8. Same as severe type.
9. Sphincter control.	9. Loss of sphincter control.	9. Same as severe type.
10. Blood in cerebro-spinal fluid.	10. More blood.	10. More blood.
11. Headache.	11. Headache severe when aroused or when conscious.	11. Headache severe when aroused.
12. Seldom relapse of unconsciousness.	12. Often relapse.	12. Unconscious for hours or days.

Brain concussion, or stunning, is a clinical symptom characterized by a more or less complete suspension of its functions as a result of cranial injury, plus an upheaval of the cerebral substance, with or without hemorrhage. It varies in severity from slight momentary giddiness and confusion of thought to the most complete insensibility, closely resembling shock, from which it is often with great difficulty distinguished. Postmortem findings in the brain following concussion vary from mere punctiform ecchymosis to actual disintegration and degeneration of the brain substance. To some extent the degree of unconsciousness may be judged by exerting pressure over the supra-orbital nerves. If unconsciousness is not profound, this will cause the patient to contract the muscles of the face. Should response to this stimuli be obtained, no further examination is necessary for the time being. Have the pulse and temperature recorded every half-hour, await developments, examine later. Spinal puncture has received much condemnation as a diagnostic aid in intracranial injuries by some of our ablest men. When it was suggested some twenty-five years ago as a diagnostic method by the late Harvey Cushing to ascertain if blood was present in the cerebro-spinal fluid, it was considered evidence that the brain was contused and lacerated, with a laceration of the arachnoid. Obviously if no blood was present, these conditions did not exist. Personally, I feel that when spinal-puncture is judiciously used there is no reason for its discontinuance. We are taught that removing spinal fluid by puncture may cause a lowering of the medulla into the foramen magnum with respiratory failure. The postmortem findings in these cases show engorgement of the lungs, viscera, and right side of the

result of trauma. Compression from depressed fractures of the skull or splinters of bone. The symptoms are at once manifest and are associated with those of concussion and contusion, and compression from intracranial hemorrhage.

1. Patient shows signs of concussion; is unconscious for a short time. 2. Arouses and is apparently quite normal, talks intelligently, gradually becoming drowsy, finally unconscious. 3. May develop a partial or complete paralysis on opposite side from injury. 4. Occasionally has slight to severe convulsions. 5. Irregular respiration. 6. Slow pulse, 40 to 50, tension high. 7. Short lucid intervals; can be aroused for short intervals. 8. Blood pressure raises by step-ladder regularity—up and up it goes. This type of blood-pressure is a symptom of ever-increasing intracranial pressure from hemorrhage. 9. On side of face opposite the hemorrhage the muscles are flaccid and the cheek goes in and out not unlike inflating and deflating a rubber bag. 10. Elevation of temperature. 11. Pupils dilated, no response on side of lesion.

Middle meningeal hemorrhage. One of the most reliable signs is lucid intervals plus continuous elevation of the blood pressure. By lucid intervals is meant that the patient arouses from his unconsciousness only to once more lapse into unconsciousness after a short interval. Examine the patient in a dark room with a flashlight, look for a hematoma of the scalp or a bruise. If the sign points to a lesion on one side, and the hematoma is on the other, remember the possibility of contra-coup. During the examination one may be fortunate enough to observe a seizure, but rarely so are we favored. Usually we must be content with a description of the seizure by the nurse, attendant or a rela-

tive. In connection with this, it is most useful to recall the localization of the various centers in the Rolandic area. In middle meningeal hemorrhage the seizure is of the Jacksonian type and unilateral. In hemorrhage from the superior longitudinal sinus the seizure may be bilateral. Even in deep unconsciousness the corner of the mouth on the non-paralyzed side tends to draw up after a facial massage. The massage is done in the following manner: vigorously rub both cheeks and wait for the response. If the corner of the mouth does draw up it is a most helpful sign. Reflexes in an unconscious patient are of little help in determining the site of injury.

Cerebral irritation is a clinical term without definite underlying pathology, usually asserting itself about thirty to forty-five minutes after injury. The patient is curled up in bed, his face away from the light, because the light irritates him. He hates light. The eyes are tightly closed. Temperature is elevated and may be different on each side of the body. Patient resents being aroused or disturbed. He is very abusive and irritable. No further examination is necessary, or indeed possible. Recovery is usually prompt and the patient is soon himself again. No specific treatment is indicated or needed.

If pressure is sufficient to cause an anemia of the brain cells, lasting for twelve minutes or more, they will not regenerate; and when brain tissue is torn or diseased, it never heals. The process may be abated but the injury caused to the brain substance remains permanent. In fracture of the skull, whether compound or simple, punctured or closed, the recognition and emergency treatment are the same. But when the skull is broken through and its fragments penetrate or depress the brain, it is highly probable that considerable injury has been done to the brain. An immediate operation is imperative. The skull may be simply contused, causing a rupture of a vessel below or an opening of the lateral sinus, resulting in fatal hemorrhage. Again the bone in the frontal region may be literally crushed and yet no grave symptoms arise, but still the amount of bone involved usually gives one an idea of the condition underneath. Fracture of the vault of the skull without basilar fracture is more rare than is usually supposed. Skull fractures, regardless of their first innocent appearance, should be carefully watched, especially the puncture variety, so often overlooked. Basilar fractures are much more dangerous to life than vault fractures. First, because greater trauma being necessary to cause them, necessarily more cerebral dis-

turbances are produced; second, owing to the vital centers here located; and third, on account of danger of sepsis.

Fractures at the base of the skull are very difficult generally. They usually involve the petrous portion of the temporal bone with hemorrhage from the ear, mouth and nose.

Diagnosis of fracture of the vault may offer difficulty, particularly in cases of linear fissure, and those involving the inner table alone. But one is more apt to be misled into a diagnosis of fracture by the peculiar feel of the infiltrated edge of a subaponeurotic extravasation, rather than to overlook one that really exists in fractures of the base. We must particularly depend upon the symptoms which we have been taught to recognize rather than any direct evidences of trauma or bony lesions. Evidences of intracranial or extracranial bleeding, either free or into the tissues, is of great value; bone injury gives only a comparative knowledge as to the severity of the injury and the amount of trouble below.

Concussion, Contusion and Compression.—These terms, though used interchangeably, have quite different degrees of meaning, although any of these conditions may come from like injuries. The three fit so closely one into the other that it is hard to say where one begins and the other ends. Concussion and contusion are the effects solely of traumatism. Should hemorrhage follow such an injury, or exudate accumulate within the intact cranial cavity, there develops cerebral compression. In concussion an individual may be momentarily stunned by a slight blow on the head with no untoward after-effect, while a more severe blow may lead to temporary loss of consciousness, with dizziness and headache, which may persist for a time. A more violent blow may produce unconsciousness and leave the victim mentally disturbed for hours or days. Disturbances of consciousness are essential to concussion, and as unconsciousness disappears, evidence of cerebral disturbances appear. There are headache, nausea, vomiting, subnormal temperature, cardiac and respiratory changes. When the patient rallies there is a loss of memory or knowledge of the injury. The pupils early in the injury are apt to be contracted. Any cranial injury that results in concussion must be given a guarded prognosis. Concussion with or without laceration usually occurs at the tips of the temporal and base of the frontal lobes, and usually opposite the external impact which caused it. These lacerations frequently occur in company with base fractures

because the same injury that causes the laceration also causes the fracture.

Compression may occur in many ways, either by the accumulation of new substances or an abnormal accumulation of the normal cerebrospinal fluid. Thus a tumor, a new growth, an oozing hemorrhage, or anything that will encroach upon the space occupied by the brain causes compression unless the process is destructive to brain tissue; then it may proceed for a long while without producing diagnostic symptoms.

The blood pressure often gives a direct clue to cranial injuries. With increased intracranial pressure, one expects a corresponding increase in the blood pressure unless the patient is in a profound shock. The three most common pathological conditions that influence blood pressures are: first, kidney lesions, particularly the contracted types of chronic nephritis; second, arterial sclerosis of the main trunks; and third, increased intracranial pressure from whatever source, blood clot, neoplasm, or an excess of cerebro-spinal fluid.

Treatment. Whatever is to be done must be done at once. If, as in the case of middle meningeal hemorrhage, one cannot with safety await the patient's removal to a hospital, and the preparation of instruments, rooms and patient for operation, a simple, effective treatment advised by Murphy is easily and quickly accomplished by ligation of the external carotid artery which gives off the internal maxillary, and this in turn the middle meningeal, which enters the skull through the foramen spinosum. The patient being unconscious, no anesthetic is needed; instruments can be sterilized quickly.

Sterilize the skin with tincture of iodine, expose the external carotid artery at the cornu of the hyoid bone just below where the digastric crosses it, and tie. The ligation of this artery is not a serious proposition. The middle meningeal artery being an end artery, it does not bleed from collateral branches when the direct source is shut off. Here we are confronted again by the necessity of distinguishing between the management of the fracture itself and the complications. Rather simple rules can be laid down for the fracture. The treatment of fracture of the vault is usually the correction of the deformity rather than the correction of the cerebral complications. In fractures of the base, quite the reverse obtains, a more critical intracranial complication is present, and deformity is rare. In basal fracture, rest, quiet and an ice cap are advisable, with sedatives when there is great restlessness; free movements of the bowels with

saline; the nose and ears to be swabbed out with antiseptic, but never washed, and plugged with sterile cotton. In cerebral compression, the treatment consists in removing the cause and dehydration, giving magnesium sulphate by mouth or by rectum until several watery stools are had. Withhold all fluids naturally. Either lumbar or ventricle puncture. Hypotonic salt solution intravenously. Glucose 50% intravenously. If these treatments are carried out intracranial tension can be held within the limits of normalcy without resorting to trephine ventricle or lumbar puncture. Open or closed fractures with deformity must be dealt with surgically. Rest, quiet, no confusion, no evidences of anxiety on part of attendants or friends, all add their portion to a more satisfactory convalescence and aid materially in the cure of the patient. Venesection should be resorted to in order to lower the blood pressure and deplete the brain when needed. Tumors and abscesses are to be treated by the usual method. When operating for tumor or depression from fracture, the exact area involved need not be perfectly mapped out, as was necessary in times when only trephine openings were made. Now we raise a larger flap of bone and can clearly see the condition of the underlying meninges as well as the brain and interior of the skull.

THE NEW ORLEANS GRADUATE MEDICAL ASSEMBLY

The seventh annual meeting of the New Orleans Graduate Medical Assembly will be held in New Orleans, March 15-18, with headquarters at the Roosevelt Hotel. As in former years, a well-rounded program has been planned, consisting of lectures, symposia, conferences, clinics and round table discussions, supplemented by scientific exhibits and motion pictures. In addition, there will be the usual exhibits of established pharmaceutical and equipment houses, as well as of medical publishers.

The speakers, as will be observed from the list published elsewhere in this Journal, are all men of authority in their special branches, and their addresses and discussions will cover all aspects of medicine and surgery, including industrial medicine. Sister Elizabeth Kenny will present the treatment of infantile paralysis which she has been teaching elsewhere in the United States for the past year or more, and military medicine will be discussed by four representatives of the Army and Navy Medical Corps.

THE VICTORY TAX AND THE
MEDICAL PROFESSION

Prepared by the
BUREAU OF LEGAL MEDICINE AND LEGISLATION

The Revenue Act of 1942 imposes a victory tax on individuals amounting to 5 per cent of their victory tax net income. This tax is in addition to all other taxes imposed by the new act, applies to income received after Dec. 31, 1942, and will continue in effect during the present war. The act provides that the victory tax shall not apply with respect to any tax year commencing after "the date of cessation of hostilities in the present war." Physicians of course will be subject to this tax to the same extent as other taxpayers.

The return that a physician must file on or before March 15, 1943, will not reflect the victory tax net income of the taxpayer nor will the victory tax be payable at that time. Since the new tax applies only to income received after Dec. 31, 1942, and since the next return includes only income prior to Jan. 1, 1943, assuming that the physician is on a calendar year basis for income tax purposes, physicians generally need not be concerned with the payment of the victory tax until their returns are executed, in 1944, for the tax year 1943. There are certain aspects, however, of the victory tax provisions of the new act that will impose requirements on physicians beginning with the first of the year.

Physicians Who Are Employers

If a physician on or after Jan. 1, 1943, employs any person, subject to certain exceptions discussed later on, and pays to such a person a wage in excess of \$12 a week, or \$624 a year, he must withhold the 5 per cent victory tax from that wage and transmit it to the government at quarterly intervals.

What Constitutes Wages.—Affirmatively, the term "wages" means all remuneration, other than fees paid to a public official, for services performed by an employee for his employer, including the cash value of all remuneration paid in any medium other than cash.

Negatively, the term does not include remuneration paid (1) for services performed as a member of the military or naval forces of the United States, other than pensions and retired pay; (2) for agricultural labor; (3) for domestic service in a private home, local college club or local chapter of a college fraternity or sorority; (4) for casual labor not in the course of the em-

ployer's trade or business; (5) for services as an employee of a nonresident alien individual, foreign partnership or foreign corporation, if such individual, partnership or corporation is not engaged in trade or business in the United States; (6) for services as an employee of a foreign government or any wholly owned instrumentality thereof, and (7) for services performed as an employee while outside the United States, unless the major part of the services performed during the calendar year by such employee for his employer are performed within the United States. Persons who perform services in the foregoing seven categories are not exempt from the payment of the victory tax, but their employers are not required to withhold the tax from their wages.

The definition of the term "wage," therefore, is broad enough to include the remuneration paid by a physician to an assistant physician, an office nurse, a stenographer, a secretary, a receptionist and other personnel employed by the physician in connection with his practice.

Withholding Deductions.—Not all of an employee's wage is subject to the victory tax; only that in excess of \$624 a year. In computing the 5 per cent victory tax to be withheld, therefore, the employer will disregard the wages paid for each payroll period in accordance with the following schedule:

Payroll Period	Withholding Deduction
Weekly	\$ 12
Biweekly	24
Semi-monthly	26
Monthly	52
Quarterly	156
Semi-annually	312
Annually	624

That is, if the payroll period for a particular employee is a week, the tax does not apply to the first \$12 paid the employee; if the payroll period is a month, the first \$52 escapes the victory tax, and so on. All wages paid in excess of the indicated amounts for each payroll period are subject to the tax and employers must either withhold 5 per cent of that excess or an amount in accordance with tables set forth in the act. These tables indicate optional amounts an employer may withhold instead of the actual 5 per cent of the wage. As an example, for a weekly payroll period, if the wage paid is over \$12 and not over \$16, 10 cents weekly may be withheld. If the wage is over \$20 but not over \$24, 50 cents may be withheld and so on for different wage groups for different payroll periods. The use of these tables will simplify greatly the withholding process and physicians should ascertain

from the office of the collectors of internal revenue where copies of the tables may be obtained.

The law provides that, if a payroll period is less than one week, the excess of the aggregate of the wages paid during each calendar week over the deduction allowed for a weekly payroll period must be used in computing the tax required to be withheld. For example, if an employee is paid on a daily basis at the rate of \$5 a day, the employer will not withhold any of the wage paid for the first two days of employment in any calendar week. The wages paid for a third day in the same calendar week will be subject to withholding on \$3, the excess of the aggregate of three days' wages, or \$15, over the weekly deduction of \$12. All subsequent wage payments during the same calendar week will be subject to withholding on the entire amount of each payment. If a payroll period is not covered specifically by the foregoing table, the deduction allowed against each payment of such wages will be the deduction allowable in case of an annual payroll period divided by 365 and multiplied by the number of days in such period, including Sundays and holidays.

In any case in which wages are paid by an employer without regard to any payroll period or other period, the deduction allowable against each payment of such wages will be the deduction allowable in the case of an annual payroll period divided by 365 days and multiplied by the number of days, including Sundays and holidays, which have elapsed since the date of the last payment of such wages by such employer during the calendar year, or the date of commencement of employment with such employer during such year or January 1 of such year, whichever is the later.

In withholding the victory tax, the employer gives no consideration at all to the marital status of the employee or to any dependents that the employee may have, or to any possible deductions to which the employee may be entitled, other than the basic deduction of \$12 a week.

Transmission of Withheld Tax to Government.

—The employer who has withheld the victory tax from wages paid to employees is required to transmit the withheld tax to the government on or before the last day of the month following the close of each quarter of each calendar year. The first report to be made by an employer to the government, therefore, will be due on or before April 30, 1943. Such an employer must keep such records and render under oath such statements with respect to the tax withheld and collected as may be required under regulations

prescribed by the Commissioner of Internal Revenue with the approval of the Secretary of the Treasury.

Receipts to Employees.—Every employer withholding the victory tax must furnish to each employee, on or before January 31 of the succeeding year, or, if the employment is terminated before the close of the calendar year, on the day on which the last payment of wages is made, a written statement showing the period covered by the statement, the wages paid by the employer to such employee during such period, and the amount of the tax withheld and collected. Duplicate copies of such statements must be transmitted to the Commissioner of Internal Revenue along with the final report made by the employer for the calendar year.

Physicians Who Are Employees

A physician who is an employee may expect deductions to be made from his wages in accordance with the procedure outlined. The deductions will be made by the employer, subject to the exceptions previously noted, whether that employer is the federal or a state government, a county, a municipality, any agency or instrumentality thereof, a hospital, an industrial or business concern or other person or agency paying wages to a physician. While physicians generally will not be required to pay the victory tax until 1944, and then on income received during 1943, physicians who fall in the category of employees will start paying the tax periodically in 1943 as it is deducted from their wages by their employers.

At the end of the tax year 1943 the victory tax that has been withheld from the wages of a physician employee will be adjusted. This adjustment will take place when the return for 1943 is filed the early part of 1944. At that time the victory tax will be redetermined on the return then filed and credit taken for the amounts that have been withheld from wages. Since the amounts so withheld are based on 5 per cent of the **gross** income in excess of \$624 a year and since the actual victory tax imposed is 5 per cent of the **victory tax net income**, that is, gross income minus specified deductions in addition to the \$624, there will in many instances be an excess in the amount withheld over the tax actually due. In such case that excess may be deducted from the income tax that will be payable. In all cases, therefore, in which employers have withheld, during 1943, periodic amounts from wages on account of the victory tax, there will be adjustments between the government and the taxpayer at the close of the tax year if such adjustments are necessary.

Postwar Credit or Refund of Victory Tax

As soon as practicable after the date of cessation of hostilities in the present war, the following amounts of victory tax paid for each taxable year beginning after Dec. 31, 1942, will be credited against any income tax or instalment thereof then due from the taxpayer and any balance will be refunded immediately to the taxpayer:

1. In the case of a single person or married person not living with husband or wife, 25 per cent of the victory tax or \$500, whichever is the lesser.

2. In the case of the head of a family, 40 per cent of the victory tax or \$1,000, whichever is the lesser. In the case of a married person living with husband or wife where separate returns are filed by each spouse, 40 per cent of the victory tax or \$500, whichever is the lesser. In the case of a married person living with husband or wife where a separate return is filed by one spouse and no return is filed by the other spouse, or in case of a husband and wife filing a joint return, only one such credit will be allowed and such credit may not exceed 40 per cent of the victory tax or \$1,000, whichever is the lesser.

3. For each dependent, excluding as a dependent, in the case of the head of a family, one who would be excluded as a dependent for income tax purposes, 2 per cent or \$100, whichever is the lesser.

If for any taxable year the status of the taxpayer, other than a taxpayer whose gross income is \$3,000 or under and who uses the simplified return form, with respect to his marital relationship or with respect to his dependents, changes during the taxable year, the amount of the credit or refund of the victory tax for such taxable year will be apportioned, under rules and regulations prescribed by the Commissioner of Internal Revenue with the approval of the Secretary of the Treasury in accordance with the months to and after the change. For the purpose of such apportionment, the fractional part of a month will be disregarded unless it amounts to more than one-half a month, in which case it will be considered as a month.

The law contains provisions under which a taxpayer may, prior to the cessation of hostilities, take advantage of his postwar credit or refund. To the extent of that credit or refund, the taxpayer may reduce the victory tax by deducting amounts paid during the year as premiums on life insurance in force on Sept. 1, 1942, certain reductions of debts and certain investments in obligations of the United States. At the end of 1943 and of each year thereafter in which

the victory tax is imposed the taxpayer may, with respect to that tax, do one of two things: (1) He may pay the victory tax in full and wait until the cessation of hostilities to claim his postwar refund or credit, or (2) he may at the time the victory tax is payable reduce the amount of the tax by deducting expenditures for purposes above described in an amount equal to the postwar refund or credit to which he would be entitled after the cessation of hostilities. Assume that Dr. X, an unmarried physician with no dependents, when he executes his return on or before March 15, 1944, finds himself owing a victory tax of \$100. Assume, further, that during 1943 Dr. X purchased government bonds, paid premiums on life insurance and reduced indebtedness, expending a total amount of \$1,000 for such purposes. Dr. X may pay the \$100 victory tax during 1944 and after the cessation of hostilities receive a refund or credit of 25 per cent of the tax, or \$25, or he may reduce the victory tax payable in 1944 by claiming credit for the amount expended for the purposes stated but only to the extent of the postwar credit to which he would be entitled, that is, \$25. In the one case, Dr. X pays the full victory tax of \$100 and gets a refund of credit later; in the other he pays \$75 and will not thereafter receive a refund or credit.

No attempt has been made to discuss in detail the intricacies of the victory tax. The object has been rather to present a broad picture with many of the technical details omitted. As previously stated, the tax does not extend to 1942 incomes and physicians generally will not have to compute the amount of the tax they must pay until the returns are filed on or before March 15, 1944. Before that time arrives, it is assumed that proper regulations will be promulgated and be given wide publicity, which will simplify the procedure for the determination of the tax.—A. M. A., Dec. 5, 1942.

COMMUNIQUE

1012 Kearny St.,
Manhattan, Kansas,
December 31, 1942.

To the Editor:

I have enjoyed my Arkansas Journal very much during the past year. There were some very good articles presented, and, of course, reading the letters from various members who had joined the Armed Services.

Since my last letter to you I have been promoted to the rank of Major.

Sincerely, William W. Johnston,
Major, M. C.

TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

"HAEMOPTYSIS," says French, "literally means blood spitting, but clinically it is restricted to the expectoration of blood from the lungs, bronchi or trachea." Fifty years ago it was pathognomonic of tuberculosis with mitral disease as the runner up. These two still dominate the field of aetiological possibilities. It has remained for the bronchoscopist to show us the prominent roles played by other conditions.

HAEMORRHAGE FROM THE TRACHEA, BRONCHI, AND LUNGS OF NONTUBERCULOUS ORIGIN

The spitting of blood is, of course, the presenting symptom in many and diverse conditions, so the need for painstaking detailed diagnostic study cannot be stressed too strongly. Short cuts and diagnoses by inference are to be condemned.

First, it is necessary to eliminate haematemesis. Useful here is the fact that blood from the lower respiratory tract is usually frothy, bright red in color, and apt to be mixed with bronchial secretion, while that from the stomach ordinarily is dark and often contains particles of food. It should also be noted that in cases of massive haemorrhage, pallor and loss of consciousness are likely to precede a haematemesis while in bronchopulmonary bleeding the blood almost invariably is expectorated before signs of actual blood loss appear.

Having by history and careful physical examination eliminated haematemesis, and obvious lesions of the larynx and nasal, oral or pharyngeal cavities, it must be assumed that the source of the blood is subglottic. It is important to note here that the authors believe that, "Far too much emphasis has been placed upon varicose veins at the base of the tongue as haemorrhagic foci." (Not a single case was found in their series.)

Now having determined that the blood is coming from the lower respiratory tract, tuberculosis is the most likely diagnosis and to quote the authors, "The disease masquerades under many and varied guises." The inquiry must be considered incomplete until the tuberculous or non-tuberculous nature of the underlying lesion has been established beyond question.

Tuberculosis being ruled out and cardiovascular disease, the blood dyscrasias, and acute lobar pneumonia eliminated, the search becomes more difficult.

Precise localization and identification of the causative lesion are dependent upon supplementary procedure. A comprehensive fluoroscopic and roentgenographic examination of the chest, including planigraphy and bronchography when indicated, is in order in every case of haemoptysis and bronchoscopy if necessary. As to the advisability of bronchoscopy a patient during or immediately following a haemorrhage, the authors believe that streaking of the sputum is not a contraindication, but that where frank haemoptysis occurs, bronchoscopy should not be performed until several days have elapsed since its cessation.

What now are the aetiological probabilities? The authors indicate them in the following table, which shows the results of careful diagnostic study of 436 patients referred for bronchoscopy. In the interpretation of this table, it is important to note as the authors point out that, "A great many patients admitted to the hospital with pulmonary bleeding are not seen by the bronchoscopist, the nature of the underlying disease being such that no indication for the direct inspection of the tracheobronchial tree is present. Included in this category are patients with cardiovascular lesions which lead to the production of chronic passive congestion or pulmonary infraction, patients with acute lobar pneumonia, and patients with blood dyscrasias. This group observed by the internist alone, represents a considerable number of patients with haemoptysis."

TRACHEAL, BRONCHIAL AND PULMONARY LESIONS FOUND IN 436 PATIENTS WITH HAEMOPTYSIS

Nature of Lesion	Number of Patients in Each Age Group at Time of Initial Haemoptysis							Total Number of Patients
	Less than 10 years	10 to 19	20 to 29	30 to 39	40 to 49	50 to 59	More than 60 years	
Bronchiectasis.....	19	25	38	19	20	15	2	138
Primary carcinoma of bronchus.....		1	3	9	20	34	15	82
Tracheobronchitis.....	4	2	21	12	12	15	8	74
Pulmonary abscess.....		4	15	16	9	5	2	51
No evidence of disease.....		2	10	14	5	3		34
Nonsuppurative pneumonitis.....	2		3	5	3	1	1	15
Suppurative pneumonitis.....		1	4	1	2	3		11
Adenoma of bronchus.....		3	3	3	2			11
Secondary cancer of lung.....				1	1	2	2	6
Lobar atelectasis.....		2			1	1		4
Primary carcinoma of trachea.....					1	1		2
Suppurating pneumoconiotic lymph node discharging into bronchus.....							1	1
Nonspecific granuloma of bronchus.....				1				1
Streptothricosis.....						1		1
Chondroma of bronchus.....						1		1
Osteoma of trachea.....							1	1
Dermoid cyst communicating with bronchus.....				1				1
Broncholithiasis.....							1	1
Neurofibroma involving wall of bronchus.....		1						1
Totals.....	25	41	97	82	76	82	33	436

Noteworthy are the authors' comments that: (1) "Inflammatory processes are responsible for the haemorrhage in the majority of the cases, the most common aetiological agent being bronchiectasis." (2) "Taking into consideration the fact that expectoration of blood is the initial manifestation of carcinoma of the bronchus in only a very small percentage of the patients, it is obvious that bronchoscopy must be done and the

diagnosis made early in the course of the disease, before the symptoms have reached the stage of haemorrhage, if a successful therapeutic result is to be achieved in these cases." (3) "Fatal haemorrhage occurred in but three of the patients in the series, each of whom had a pulmonary abscess." Haemorrhage from the Trachea, Bronchi and Lungs of Nontuberculous Origin. Chevalier L. Jackson and Sidney Diamond, Amer. Review of Tuber., August, 1942.

COMMUNIQUE

Jan. 2, 1943.

To the Editor:

Have just received your letter written December 10th. You have turned into a most faithful correspondent and I won't forget you when I get home. I'll give freely of my time to any of the problems you may need solved. In the last Journal I notice that my professional card still reads: "T. P. Foltz, M. D." I imagine that some of your clerical help had not been informed about the F. A. C. S. I noticed the same error in the case of Wolferman. What the hell did that guy have to get in that for? Can't he ever let me get ahead of him in anything? Just ask him if he has ever done an orchidetomy on a Melanesian suffering from filiariasis. You might, after his embarrassed denial, mention to him that I now have a series of two-same patient. Things are still looking up out here and we all feel like 1943 will bring an end to the whole mess. Hope we are not too optimistic but there has been a tremendous change in the short

time we have been here and if the next few months bring as great a change, then I know our views are more than wishful thinking. The wonderful job of production at home is becoming more apparent here each day. Sorry I can't write more news but there is no reason to try, only to have it all cut out. My very best to all. Best regards, T. P. Foltz, Lt. M. C., U. S. N. R. Navy 1220—Fleet Postoffice, San Francisco.

COMMUNIQUE

Roswell, New Mexico.

To the Editor:

Going good here now. See this mountain (Sierra Blanca) every day and its pretty chilly in these parts for a river rat. Hope all is well in Arkansas. L. D. Massey, Major, M. C., A. U. S.

The President's Page

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MEDICAL EDUCATION IN ARKANSAS

The University of Arkansas School of Medicine had an annual appropriation this year of \$345,000.00, of which \$300,000.00 came from the liquor tax, and \$45,000.00 came from the millage tax.

The number of students in each class is as follows:

Freshman Class	82
Sophomore Class	71
Junior Class	61
Senior Class	70
Special Students	7
	<hr/>
	291

Two hundred and sixty or 89% of these students are from Arkansas. In the present freshman class, only one out-of-state student was admitted and that was done early in the year.

The faculty totals 141 members. Of this number 45 have entered the armed forces which leaves 96 who are active at the present time.

According to the above figures, you will note that a little more than \$1,185 per student is expended annually. However, the fact that many charity patients are treated must also be taken into consideration.

The following is information concerning the University Hospital for the fiscal year, July 1, 1941, to July 1, 1942:

Total number of patients	4,172
Total hospital days	58,737
Average daily census	165
Average daily stay	14

In the out-patient department, or Isaac Folsom Clinic, for the same period there were 63,524 examinations and treatments.

Yours for Victory,
R. B. ROBINS, M. D., President.

THE JOURNAL

OF THE

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W. R. BROOKSHER, M. D., Editor
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EDITORIALS

PROCUREMENT AND ASSIGNMENT
IN 1943

As is generally known, Arkansas physicians patriotically volunteered during 1942 in excess of the quota set by the military authorities. For the present, it is contemplated that only a few physicians will be sought in Arkansas. However, the demands of the armed forces may cause a sudden change necessitating a call for a number of physicians, most probably, however, less than was the quota in 1942. It becomes necessary, therefore, to ask county procurement committees to thoroughly study the needs of their respective communities and to determine from which localities additional physicians may be drawn to meet the needs of expanding armed forces. In anticipation, these committees are now being asked to make a complete survey of physicians and of medical care as is now available to the civilian population.

There exists, too, the need for a possible relocation of physicians within the state for practice on a civilian basis. Such a change of location requires all the patriotic spirit as does entrance into the military service, yet lacks the

glamour which accompanies departure for the fighting forces. The contribution made by the individual physician who takes over in a civilian capacity where there is a shortage of physicians is fully as great as that of the man who enters the military service. Such needs have not been shown to exist in Arkansas but it is quite conceivable that they may occur. It becomes necessary, therefore, to make plans now for such relocations should the need arise. It is urgently requested that any physician over 45 years of age who wishes to participate in the war effort by a civilian relocation send his name to the state procurement and assignment chairman.

The departure of physicians in a community may give rise to a most disturbing situation, in that, with their departure, other physicians within that community considered essential, may depart for other locations within or without the state, thus depriving that community of the medical service which procurement and assignment service had felt would be adequate during the war emergency. Such changes of location should not occur if the medical profession is to contribute its best service in an all-out war effort.

A DOCTOR'S PLEA IN WARTIME

The doctor's life, in times like these,
Is not exactly one of ease.
For, on the home front, each M. D.
Is busier than any bee!
He's shouldering the burden for
The other docs, who've gone to war.
This leaves your doctor precious little
Time to sit around and whittle.
And indicates the reason why
You ought to help the poor old guy.

HOW?

1. By keeping yourselves in the best of condition
Thus avoiding the ills that demand a physician.
2. By phoning him promptly when illness gives warning,
But—unless very serious—waiting till morning.
3. By cheerfully taking whatever appointment
He makes for prescribing his pills or his ointment.
4. By calling on him where he works or resides
Instead of insisting he rush to your sides.
(Of course, he'll come 'round when there's need for his service
But spare him the trip when you're nothing but nervous.)

5. And, last but not least, you can help in this crisis

By carefully following Doctor's advices.

If these commandments you'll adhere to
A doctor's heart you will be dear to!

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WAR PRODUCTION BOARD ORDER AFFECTS VITAMIN CAPSULES

To conserve vitamin A supplies during war-time, W.P.B. order L-40 limits the content of capsules to 5,000 vitamin A units.

In compliance with this order, capsules of Mead's Oleum Percomorphum 50% with Viosterol now contain 83 mg. of oil, equivalent to 5,000 vitamin A units and 700 vitamin D units per capsule.

The new size capsule is now supplied in boxes containing 48 and 192 capsules—about twice the number of capsules without increase in price.

COMMUNIQUE

January 6, 1943.

To the Editor:

Just a word from the heart of Texas. I have been at Fort Sam Houston for six months and in the Station Surgeon's Office there.

I am in charge of the Post Dispensary. When Eighth Service Command Headquarters were located here, a lot of Little Rock and Arkansas doctors were here awaiting further assignments.

Army life is swell, but it is not like practicing pediatrics.

I get THE JOURNAL regularly and enjoy it very much.

My regards to all in Arkansas.

Wilfred R. Parsons,

Captain, M. C., A. U. S.

COMMUNIQUE

To the Editor:

What's wrong? I haven't received The Journal in several months. Guess my letter was misplaced and you didn't know where to send it. How is everything coming along in the medical profession? I received my promotion to major a few days ago and I often think back to the early 30's when I went to Fort Smith to go before a one man medical board to get my commission. It hasn't been too bad.

Well, keep the fire burning and we will all be back some day to get in the grand old channel again.

Regards,

J. K. Grace, Major, M. C.
536 Sig. A. W. Bn.,
Drew Field,
Tampa, Florida.

PROCEEDINGS OF SOCIETIES

Crawford County Medical Society has elected the following officers: President, B. B. Bruce, Alma; Vice-president, J. R. Crigler, Alma, and Secretary-treasurer, S. D. Kirkland, Van Buren.

St. Francis County Medical Society has elected the following officers: President, H. L. McClen-don, Palestine; Vice-president, A. B. Caldwell, Forrest City; Secretary-treasurer, J. O. Rush, Forrest City; Delegate, J. O. Rush, and Alternate, J. S. Davidson, Forrest City.

Jefferson County Medical Society has elected the following officers: President, W. H. Bruce; Vice-president, B. D. Luck, Jr., and Secretary-treasurer, Fred Hames.

The Fifth Councilor District Medical Society met in dinner session at El Dorado January 5th for the following program: "Abdominal Injuries and the Healing of Wounds," R. B. Robins, Camden; "Diseases of the Heart," S. J. Allbright, Searcy, and "Peptic Ulcer" (Motion picture by John Wyeth and Company). Officers elected are S. J. McGraw, El Dorado, President; Rowland Robins, Camden, Vice-president, and G. F. McLeod, Magnolia, Secretary.

Greene County Medical Society has elected the following officers: President, J. J. Hudgins; Vice-president, J. A. Dillman; Secretary-treasurer, W. McD. Lamb; Delegate, Robert Haley, and Alternate, Earle D. McKelvey.

Little River County Medical Society has elected the following officers: President, E. R. King; Secretary-treasurer, Pat Hamm; Delegate, Pat Hamm, and Alternate, E. W. Yates.

Saline County Medical Society has elected the following officers: President, Dewell Gann, Sr.; C. W. Jones, Secretary-treasurer, and L. J. Harrell, Delegate.

PERSONALS AND NEWS ITEMS

The Mississippi County Medical Society was addressed January 5th by T. F. Hudson, Luxora, "Rocky Mountain Spotted Fever."

M. L. Skaller, Secretary.

Capt. J. Donald Hayes, Little Rock, is now stationed at the Army Flying School, Waco, Texas.

W. W. Johnston, formerly of Helena, now stationed at Manhattan, Kansas, has been promoted to major.

H. V. Stewart, Little Rock, is now located at Deaconess Hospital, Milwaukee.

Carl Wilson, Fort Smith, now stationed at Camp Maxey, Texas, has been promoted to Captain, Medical Reserve Corps.

L. J. Kosminsky, Texarkana, has been appointed Medical Officer on the Regimental Headquarters staff of the Arkansas State Guard.

Ralph E. Crigler, T. P. Foltz, Carl L. Wilson and S. J. Wolfermann, Fort Smith, were elected Fellows of the American College of Surgeons on December 13th.

Capt. L. S. Dunaway, Conway, is now assigned to duty with Station Hospital No. 94, Camp Robinson, Arkansas.

Lt. Edwin L. Dunaway, Conway, is now assigned to duty at Enemy Internment Camp, Stringtown, Oklahoma.

J. Harry Hayes and J. Donald Hayes, Little Rock, were elected Fellows of the American College of Surgeons on December 13th.

MARRIED—At Little Rock, December 26th, Lt. C. H. Beasley and Dr. Grace Claire Allnutt.

S. S. Kirkland, stationed at Camp Barkley, has been promoted to major.

Capt. W. O. Loftis, formerly on duty with the Induction Station, Little Rock, has been transferred to the Induction Station, Abilene, Texas.

J. B. Askew, Little Rock, has accepted appointment with the United States Public Service and is stationed at San Francisco, California.

W. E. Ellington, Paragould, has been elected director of the Security Bank and Trust Company.

Maj. Ellery C. Gay, now stationed at Lawson General Hospital, Atlanta, has been elected a Fellow of the American College of Surgeons and has become a Diplomate of the American Board of Plastic Surgery.

C. S. Early, Camden, has been elected a director of the Merchants and Planters Bank.

S. J. Wolferman, Fort Smith, and F. Walter Carruthers, Little Rock, attended the joint session of the Clinical Orthopedic Society and the American Association of Orthopedic Surgeons in Chicago during January.

J. K. Thompson, Fort Smith, has been appointed Lieutenant, Medical Corps, Army of the United States, and assigned to Medical Field Service School, Carlisle, Pennsylvania.

Lt. M. W. Chastain, Bentonville, has been transferred from Aviation Cadet Training Center, San Antonio, to A. A. F. F. T. D., Muskogee, Oklahoma.

W. J. Ketz has been elected a director of the Batesville Kiwanis Club.

S. J. Wolferman, Fort Smith, recently addressed the Exchange Club of that city on "The Supply of Physicians."

D. E. White has been elected a director of the El Dorado Kiwanis Club.

Capt. E. P. Griffin, Jr., Atkins, has successfully passed examinations as a Diplomate of the American Board of Radiology.

A. L. Carter is building a hospital at Berryville.

C. P. Harris, Leachville, has moved to Jonesboro.

J. H. Burge, Lake Village, has been elected a Fellow of the American College of Surgeons.

Governor Adkins has appointed the following commission to study plans for a more adequate control of tuberculosis: W. B. Grayson, H. Fay H. Jones, J. D. Riley, and A. C. Shipp.

W. Max Brown, Clarendon, has been promoted to Major, Medical Corps, United States Army.

Paul Gray has been elected city health officer at Batesville.

A. F. Hoge, Fort Smith, has been elected director of the City National Bank.

VITAMIN FILMS IN COLOR

During the past year the three 16 mm. silent motion pictures in color, describing certain vitamin deficiency diseases, which were made available by Eli Lilly and Company, Indianapolis, for showing before medical groups under sponsorship of a physician, have been in continuous demand. One film deals with deficiency of thiamine chloride (beriberi), another with nicotinic acid deficiency (pellagra), and the third

with ariboflavinosis. To meet increasingly frequent demands for the films, additional new prints have been placed in circulation and are now ready for loan. The major part of all films concerns the clinical picture presented by the patient with reference to treatment by diet and specific medication. They do not contain advertising of any description, nor is the name of Eli Lilly and Company mentioned.

The films were made at the Nutrition Clinic of the University of Cincinnati at the Hillman Hospital, Birmingham, Alabama, where studies were initiated in 1935, under the joint auspices of the Department of Internal Medicine of the University of Cincinnati and the University Hospitals of Cleveland. Subsequently, these investigations became a cooperative project between the Departments of Medicine of the University of Cincinnati and the University of Alabama, and the Department of Preventive Medicine and Public Health of the University of Texas.

OBITUARY

WILLIAM A. SNODGRASS, age 68, Little Rock, died January 4th. Born in Calloway County, Kentucky, March 17, 1874, he came to Little Rock with his family in 1889. Graduating from the University of Arkansas School of Medicine in 1897, he had practiced in Little Rock from that date. In 1898 he served as city physician. During World War I he organized a Red Cross hospital unit for overseas service, being later assigned to the American Expeditionary Forces as a major. He held appointment as emeritus professor of surgery in the medical school faculty following many years of active teaching. In addition to his membership in the Pulaski County Medical Society and in the Arkansas Medical Society, in which organizations he had served in several official capacities, he was a fellow of the American Medical Association and of the American College of Surgeons. Surviving relatives are his wife, three daughters and four sons, one of whom, Dr. W. A. Snodgrass, Jr., is in active practice at Pine Bluff.

HENDRIC ARNOLD ROSS, age 58 years, died at his home in Arkadelphia December 18th. Born at Okolona, he graduated from the Okolona High School, later attended the Philadelphia School of Pharmacy and received his medical

degree from Jefferson Medical College in 1912. He first located for practice at Okolona but moved to Arkadelphia in 1919. A member of the Methodist church he was an active worker in civic affairs. Surviving relatives are his wife, two daughters, a son and four brothers, one of whom, Dr. T. T. Ross, is with the State Board of Health.

RICHARD T. HENRY, age 62, died at his home in Springdale January 4th of coronary thrombosis. Born at Bentonville February 25, 1881, he graduated from the University of Arkansas School of Medicine in 1911 and following an internship in Little Rock, located for practice in Bentonville. He moved to Springdale in 1914 and became an active worker in the civic life of that city, having served as member of the school board and as its president since 1936. He was a past-president and a charter member of the Springdale Rotary club and was a member of the Methodist church, the Masonic lodge, the Springdale Country Club and Chamber of Commerce. In the Washington County Medical Society he had served in various official capacities and was a past-president of this society and of the Tenth Councilor District Medical Society. Surviving relatives are his wife, one daughter and two sons, both of whom are now in the military service.

RANDOM THOUGHTS

December 25th. Today we offer heartfelt gratitude to our comrades in arms who are fighting to assure that those who have sought to destroy "Peace on Earth; Good Will to All Men," shall not again offend.

December 30th. One look at that photograph of Capt. John Smith, formerly of Russellville and Little Rock, working in his overseas operating room and no home-front surgeon will complain of the service he receives from the nursing staff.

January 2nd. Almost on time into Little Rock tonight which is an unusual happening. To the Albert Pike where we meet Council Chairman McNeil deep in discussion with Harry Hayes to all of which we listen.

January 3rd. Procurement meets this day in prolonged consideration of the physicians needed for the medical care of the citizens of Pulaski County. Returning homeward, Vinsonhaler, of KLRA, relates experiences with his colleague on the appeals board, genial Callahan, who knows what it means to take a pig in on a medical bill. Departing on time, arriving on time, an indication that holiday travel is on the wane.

January 5th. By rail to Camden thence with President Robins to El Dorado where the Fifth Councilor District Medical Society meets, all arrangements handled by D. E. White, necessitating a major portion of the program being given over to apologies for errors and omissions, but withal a pleasant occasion. At Texarkana it would seem that The Texan would never arrive but at 3:00 a. m. we tumble into our lower, thoughtfully reserved a week ago, and sleep on into Dallas.

January 6th. Procurement and Assignment again confers with much discussion of "critical areas," but no mention of quotas which is most welcome news.

January 7th. Departing Fort Worth relaxing as much as possible into Muskogee where we miss a bus by a minute but forewarnedly place ourselves in line for the next one and ride in as comfortable seat as is afforded across to Fort Smith, the near-decrepit vehicle denying our usual sleep as we ride.

January 13th. The annual gathering of the Sebastian County Medical Society is augmented by many uniformed physicians, contributing to the gayety of the occasion. Eberle is in rare form as "ringmaster" and the speeches while numerous, are most brief, Crigler's imitation of Bob Burns excepted. Hall, from Greenwood, takes time out to say a good word for these meditations, a high light of the evening for us. Wolferman brings the story of the country storekeeper rationed on dates because of a shortage of nuts.

January 17th. At 3:00 a. m. in bitterly cold Kansas City, we meet the family returning from the sunshine of Arizona, and we rather doubt that they are enthusiastic over returning.

January 18th. Our second trip within thirty days for a meeting of the Southeast Arkansas Medical Society is denied by delayed train schedules. Wartime transportation being what it is, we think we will make plans to celebrate Victory with this group.



These two types of KARO differ only in flavor. In chemical composition they are practically identical. Their caloric values are the same.

If your patients find grocers temporarily out of one type, the same amount of the other may be prescribed.



How much KARO for Infant Formulas?

The amount of KARO prescribed is 6 to 8% of the total quantity of milk used in the formula—one ounce of KARO in the newborn's formula is gradually increased to two ounces at six months.

CORN PRODUCTS REFINING CO.

17 Battery Place • New York, N. Y.

WHEN YOU SEND THEM

send



Camel

costlier tobaccos_

CIGARETTES _____

the Favorite *



YOUR friends, relatives, fighting in far-off places . . . grimly battling against death, infection . . . think what a smoke can mean to them . . . in comfort—in consolation . . .

And remember, too, when you go to send that precious carton of cigarettes, that Camel, by actual survey*, is the favorite of men in the armed forces—for mellow mildness and appealing flavor.

Your dealer sells Camels by the carton; drop in and see him today.

* With men in the Army, the Navy, the Marine Corps, and the Coast Guard, the favorite cigarette is Camel. (Based on actual sales records in Post Exchanges and Canteens.)

_the favorite brand in the Armed Forces*

WOMEN'S AUXILIARY NEWS

Members of the Bowie-Miller County Medical Society and the Auxiliary held its annual Christmas dinner December 18th at Hotel McCartney. Reservations were made for 60 guests.

Dr. R. R. Kirkpatrick acted as toastmaster, introducing Dr. R. L. Sanders of Memphis, guest speaker, who made an interesting talk.

The Christmas motif was carried out in the table decorations of greenery and white candles, the centerpiece having been a China Madonna, carrying out the white-Christmas theme.

Mrs. V. A. Adams presented a Christmas playlet, in which the following children were cast: Announcer, Miss Betsy Weathers; actors, Elizabeth Kitchens, Joan Panos, Jane Parsons, Nell Davies, Martha Jay McDonald, and Corinne Carroll.

A tribute was paid to Texarkana doctors in service, including Dr. Hutchinson, Dr. John Porter, Dr. Burnette, Dr. A. Collom, Dr. Priest, Dr. McKay, Dr. Jones and Dr. Kemp, and the following sons of local doctors: Lt. James Kittrell, Lt. Thomas Kittrell, Lt. Milledge Watts and Lt. Lloyd George Neblett.

Mrs. C. E. Kitchens was chairman of the arrangements committee, assisted by Mrs. H. L. Williams and Mrs. Ralph Cross. Table decorations were in charge of Mrs. R. W. Pickett, Mrs. Roy Baskett, and Mrs. Joe Tyson.

Dr. and Mrs. Mahlon D. Prickett entertained at dinner

December 15th at their home in honor of members of the Hot Spring County Medical Society and the Women's Medical Auxiliary composed of wives of physicians.

Those enjoying the hospitality of Dr. and Mrs. Prickett were Dr. and Mrs. H. L. Brown, Dr. and Mrs. Wilbur Barrier, Dr. and Mrs. Raymond McCray, Dr. and Mrs. W. G. Hodges, and Mrs. R. Y. Phillips.

After an excellent course dinner the members of each organization met in separate sessions for business. Dr. Prickett, President of the Hot Spring County Medical Society, presided over this group, while Mrs. Prickett newly-elected chairman of the Hot Spring County Women's Medical Auxiliary, took charge and directed plans of service for this organization. Reports were made of much valuable cooperative work done through the Red Cross, P.-T. A., and Nutrition classes; and an outline of future service was suggested by Mrs. Barrier and Mrs. Brown.

As the joint meetings of these two groups have proved so helpful and socially enjoyable it was decided to continue these meetings regularly once a month, with resident doctors and their wives acting as hosts.

The next regular group meeting will be entertained at the home of Dr. and Mrs. Raymond McCray in January.

The Auxiliary elected Mrs. McCray chairman of Hygeia, Mrs. Hodges chairman of Student Loan, Mrs. Brown chairman of Doctors' Day observance, and Mrs. Phillips chairman of Publicity.

Announcing The Seventh Annual Meeting of THE NEW ORLEANS GRADUATE MEDICAL ASSEMBLY MARCH 15-18, 1943

GUEST SPEAKERS

CARDIOLOGY:

DR. TINSLEY R. HARRISON, Winston-Salem

DERMATOLOGY:

To Be Announced

GASTRO-ENTEROLOGY:

DR. GEORGE B. EUSTERMAN, Rochester

GYNECOLOGY:

DR. ROBERT J. CROSSEN, St. Louis

INDUSTRIAL HEALTH:

DR. JAMES G. TOWNSEND, Bethesda

INFANTILE PARALYSIS:

SISTER ELIZABETH KENNY, Minneapolis

MEDICINE:

LT. COL. EDGAR V. ALLEN, Rochester
(Now of Omaha)

MEDICINE:

DR. LOUIS HAMMAN, Baltimore

NEUROLOGY:

LT. COL. R. G. SPURLING, Louisville
(Now of Washington, D. C.)

OBSTETRICS:

DR. NICHOLSON E. EASTMAN, Baltimore

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DR. RALPH I. LLOYD, Brooklyn

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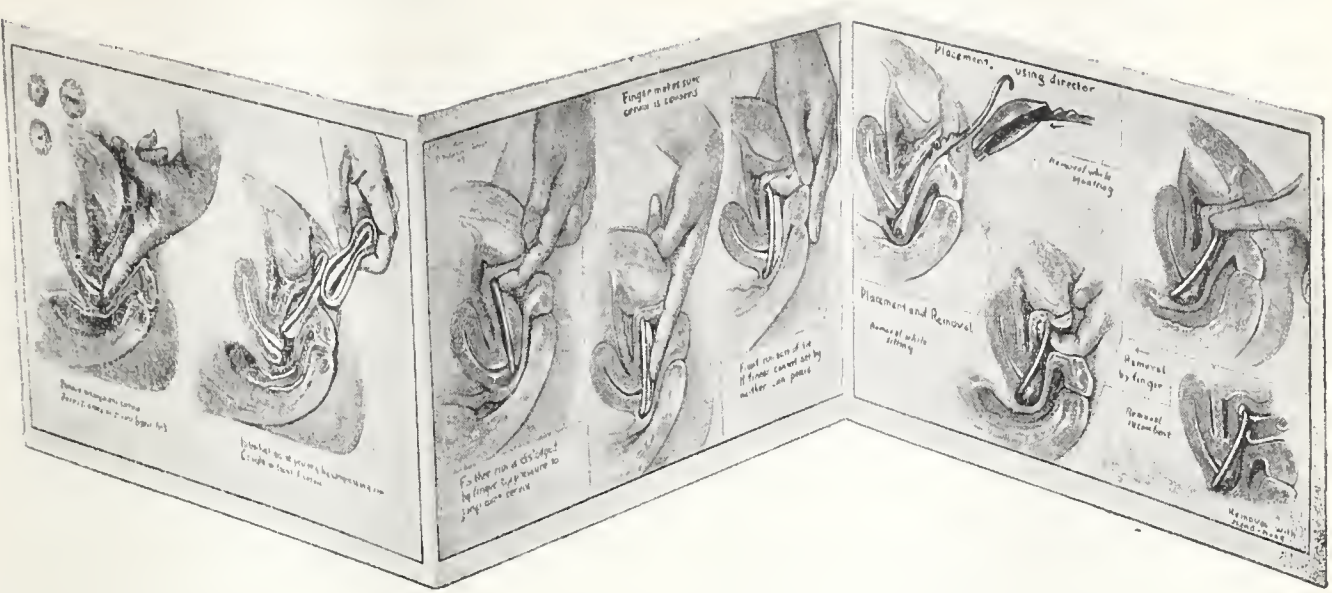
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BOOK REVIEWS

A Venture in Public Health Integration—The 1941 Health Education Conference of the New York Academy of Medicine: By Edward J. Stieglitz, M. D., Washington, D. C., Edward L. Bernays, Counsel in Public Relations, New York, N. Y., and Allen Freeman, M. D., Professor of Public Health, The Johns Hopkins University. 56 pages. Price \$1.00. Columbia University Press, New York.

This little book is made up of three papers presented at the 1941 Health Education Conference of the New York Academy of Medicine. The Role of Health Education in the Promotion of Optimal Health and in the Retardation of Degenerative Diseases, by Dr. Stieglitz, is well worth reading by every physician for a general insight of this field. Barriers to Health Education, by Mr. Bernays, presents the difficulties and recommends procedures. It is most suitable for those working in the field of health education. Health Education, by the Private Practitioner, the Voluntary Agency, and the Department of Health, by Dr. Freeman describes the health education activities of each group.

Military Surgical Manuals, Volume II—Ophthalmology and Otolaryngology: Prepared and edited by the subcommittees on Ophthalmology and Otolaryngology of the Committee on Surgery of the Division of Medical Sciences of the National Research Council. 331 pages with 124 illustrations. Philadelphia and London: W. B. Saunders Company, 1942. Price \$4.00.

Medical officers of the front line troops, particularly in regimental and battalion medical sections, because of the strenuous physical nature of their duties, will necessarily be younger men not long out of medical school, and with a relatively small amount of civilian medical experience. Few if any specialists will be found among them. Since a large percentage of the "sick and wounded" coming to their attention, both in garrison and in the field, will fall under the heading of eye, ear, nose, and throat, this manual will prove to be a valuable addition to the young officer's equipment. The text is simple in effect, discusses all the common injuries and illnesses, and offers a standard accepted method of treatment for each. In this way the authors avoid confusion by omitting small details and controversial points. The manual should be in the library of every regimental medical detachment, as well as larger units.

The Art and Science of Nutrition. By Estelle E. Hawley, Ph. D., and Grace Carden, B. S., University of Rochester School of Medicine and Dentistry. Pp. 619. 140 illustrations, 12 in color. Price \$3.50. Saint Louis: C. V. Mosby Company, 1941.

This book presents worth-while information on foods and feeding to the doctor the nurse and the housewife. The authors discuss the scientific knowledge of food and its use, the metabolic needs in disease and in health and the preparation of food in an attractive and tasty manner.

Military Surgical Manuals, Volume II—Ophthalmology and Otolaryngology: Prepared and edited by the Subcommittees on Ophthalmology and Otolaryngology of the Committee on Surgery of the Division of Medical

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COMMUNIQUE

December 19, 1942

To the Editor:

I never have had anything but compliments for your magazine—BUT I get the December issue today and hasten to write you in hopes that the data on the Sebastian County members is a typographical error and not facts. The composer seems to have raised the mortality rate of our members to a high degree. In fact, if the information is correct, it seems to be damned dangerous to belong to our county while the rest of the boys seem to be doing OK. To say I got a start when I saw the deceased sign in front of Fred Krock's name is putting it only mildly, but when I saw every other member of the society below him, that are in the service, was dead also, I heaved a sigh of relief. Between you and the composer, you are fixing up more than our enemies. All right, all right, I know you had nothing to do with it.

Particularly enjoyed the letter from the doctor in Utah. I know just how he feels. Find swimming and sun-bathing on Waikiki this day, a variety also.

Dr. Barrett of Jonesboro dropped in on me for an all too brief visit the other day and I gave him the November Journal to get what dope he could out of it.

Must quit, but couldn't fail to get on you about your error, or at least I hope it is an error.

Best of luck.

Sincerely,
Jim W. Amis,
Lt. Comdr., M. C., U. S. N. R.

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No. 10

HYPERTENSION: NEWER THEORIES, PROGNOSIS, AND TREATMENT

J. N. COMPTON, M. D.

Associate Professor of Medicine, University of Arkansas School of Medicine

Normal Blood Pressure

The ranges of normal blood pressure have never been exactly fixed. A systolic blood pressure of over 150 after adequate rest, and a diastolic blood pressure of 95 to 100 must be viewed with suspicion. In a review of a quarter of a million healthy Americans by the Medical Directors of several large insurance companies in New York, the average normal pressure for age 20 was 120/79, while the average normal for age 60 was 134/87. It may therefore be seen that over a period of 40 years, the average gain for the systolic pressure was 14 points as compared to 8 points for the diastolic pressure. With such a variable quantity as blood pressure, however, liable to so many fluctuations, it is not advisable to accept too rigid a figure. A plus or minus 10 points for each age group would probably be reasonable.* A commonly quoted rule for the estimation of the systolic pressure has been the age of the patient plus 100. For a patient past 60, this estimation might be too high, and while it might not be considered dangerous or alarming, it would still not be normal. Of more importance is the diastolic reading. It is well known that high systolic pressures are much better stood than high diastolic pressures, since the latter indicates increased peripheral resistance in the arterial tree, and throws a heavier burden on the heart. True arterial hypertension therefore is usually represented by an increased diastolic blood pressure.

Many physicians take blood pressure readings carelessly, and too hurriedly. For a correct reading, the patient should be permitted to lie down for 20 minutes in a quiet room preceding the reading. At the time of the reading, the brachial artery pulsation should be palpated with the finger, and the stethoscope applied directly over

this pulsation. The forearm should be fully extended and the whole extremity relaxed. Three or more inflations of the cuff are necessary to obtain the right levels. In estimating the diastolic pressure, the rather sharp transition from the loud sharp sound of the third phase to the faint muffled sound of the fourth phase should be accepted as the correct diastolic blood pressure. Since there is considerable fluctuation in everyone's blood pressure from time to time, a blood pressure reading taken every hour over a period of 24 hours, and the mean pressure estimated, would give a more accurate estimation. This, however, is not **practicable** in ordinary office practice.

Classification of Hypertension

There is no satisfactory etiological classification of hypertension at present. This is due mainly to the fact that the etiology of essential hypertension, which makes up 85% of the diagnoses of hypertension, is in much debate today. Formerly classified as a primary hypertension, there is good evidence at present that it may prove to be secondary to disturbed intra-renal hemodynamic pressure, or disturbed arterial circulation of the kidneys. The following classification is one given by Gilchrist of Edinburg, England, and is presented merely to show the numerous causes of hypertension:

Diastolic Hypertension ¹

I. Extra-renal Origin

A. Neurological

- (1) Emotional or psychic states
- (2) Increased intracranial pressure
- (3) Mid-brain and brain-stem lesions
 - (a) Poliomyelitis
 - (b) Encephalitis
 - (c) Trauma
- (4) Diencephalic syndrome

B. Endocrinal

- (1) Suprarenal dysfunction
 - (a) Paroxysmal hypertension (pheochromocytoma)
 - (b) Adreno-genital syndrome (cortical adenoma)

* Read before the Sixty-seventh Annual Session, Arkansas Medical Society, Hot Springs National Park, April 29, 1942.

- (2) Pituitary adenoma
 - (a) Cushing's basophilic syndrome
- (3) Ovarian hypofunction
 - (a) Menopausal
 - (b) ? Ovarian neoplasms
- (4) ? Placenta
 - (a) Certain pregnancy toxæmias
- C. Peripheral (arterial spasm or sclerosis)
 - (1) Toxic origin: lead
 - (2) UNKNOWN—"essential hypertension"
- II. Renal Ischaemia
- A. Occlusive vascular disease
 - (1) Renal arteriolar sclerosis
 - (2) Stenosis of a main renal artery
 - (3) Coarctation of the aorta
 - (4) Amyloidosis
 - (5) Infraction, thrombosis, trauma
 - (6) Congestive heart failure
 - (7) Aberrant renal artery
 - (8) Periarthritis nodosa, disseminated lupus erythematosus
- B. Primary renal disease
 - (1) Chronic glomerulo-nephritis
 - (2) Chronic pyelonephritis
 - (3) Renal tumors
 - (4) Polycystic disease
 - (5) Nephroptosis: postural hypertension
- C. Renal reflux (impedance to urinary outflow)
 - Hydronephrosis: congenital or acquired
 - (1) Bilateral:
 - (a) Urethral stricture
 - (b) Prostatic obstruction
 - (c) Vesical neoplasms
 - (d) Pelvic tumors, ? pregnant uterus
 - (e) "Spinal" bladder
 - (2) Unilateral:
 - (a) Impacted calculus
 - (b) Ureteral strictures
 - (c) Sympathetic imbalance

It can be seen from the above that unless a careful investigation of every case of hypertension is instituted, a diagnosis of essential hypertension may be made frequently when secondary causes may be present, such as renal urological disease.

Theories Concerning the Etiology of Essential Hypertension

Three main factors have been shown necessary to maintain blood pressure: (1) Force of the pump, or heart, (2) volume of blood, (3) peripheral resistance. In essential hypertension, increased peripheral resistance has been known for some time to be responsible for the hypertension. This resistance seems to be mainly increased in the terminal arterioles, or precapillary arterioles. Increased vasoconstriction is present here which necessitates a stronger head of pressure of the blood column to reach the tissues. After arteriolar vasoconstriction exists for a variable period of time, sclerotic changes may take place in these arterioles due to the actual stress and strain from the increased blood pressure. These structural changes of the arteriolar walls sooner or later diminish their quality

of elasticity so that they remain in a permanent state of vasoconstriction. It has been shown that considerable arterioscleroses of the larger arteries may be present without hypertension while scleroses of the smaller arterioles usually results in hypertension. Elderly patients with hardened sclerotic larger arteries may have normal blood pressures, provided their smaller arterioles are not sclerotic. This is particularly true if the renal arterioles are in good condition.

What is back of the vasoconstriction of the terminal arterioles in essential hypertension?

Goldblatt's epochal work in 1933 on dogs, in which he produced hypertension by constriction of the renal arteries, called attention to a possible kidney humoral substance as the cause.² Page,³ and others, have since demonstrated that the ischemic kidney forms a pressor substance known as renin which when mixed with a pseudo-globulin substance in the blood forms a compound called angiotonin which acts on the peripheral arterioles to cause vasoconstriction. This substance is also thought to cause vasoconstriction of the efferent renal arterioles, increasing intra-glomerular pressure, and maintaining glomerular filtration.⁵ It is also thought to act directly on the heart muscle, increasing its work but not necessarily its output.⁶

(Show slide.)

Subsequent investigation by Page,⁷ Grollman,⁴ and others has shown that a humoral substance is also elaborated by the normal kidneys which is antagonistic to renin. In fact, hypertension is thought to occur due to a lack of balance between the renin and anti-renin factors. Anti-renin has been administered to patients suffering with severe malignant hypertension with a fall in blood pressure and control of their symptoms. Improvement in their retinal arteries and kidneys was also noted. When the substance was withdrawn, the blood pressure rose and the symptoms recurred. It is believed that this substance acts by relaxing arterial vasospasm. Only a small amount of anti-renin can be obtained from a large amount of kidney tissue, and extraction is expensive. Reactions, once severe, have now been controlled by purification of the extract. Anti-renin is unavailable at this time, and it is purely experimental. The main hope at present is that it can be isolated, analyzed chemically, and made synthetically. Hypertension might then be controlled by daily administration just as diabetes is controlled by insulin.

Experimental renal hypertension simulates very closely essential hypertension of humans. In both,

there is no loss of kidney function as shown by negative urinalyses and kidney function tests. Both produce vasoconstriction of arterioles and subsequent arteriolar-scleroses as shown by studies of renal and retinal arterioles and others. Benign and malignant types may be produced experimentally in animals by the degree of constriction of the renal arteries, and these mock very closely benign and malignant essential hypertension in man, with the same ultimate damage to the brain, eyes, heart, or kidneys. There is a high percentage of scleroses of the arterioles of the kidneys found at autopsy in cases of essential hypertension where there was no evidence of renal disease during life, and no other arterioles showed similar changes. On the other hand, essential hypertension has been shown to exist much more frequently in hypertensive families, as though there may be an inherited factor. This is hard to explain on the theory that renal ischemia is responsible for the hypertension in all cases.

Certain types of unilateral kidney disease have been reported responsible for hypertension in the literature, and in a few cases, removal of the affected kidney has resulted in permanent reduction of the blood pressure.⁸ In these cases of unilateral kidney disease, the pathological process is thought to extend up into the affected kidney and involve the renal arterioles, interfere with renal arterial circulation and produce an ischemia, or a clinical "Goldblatt kidney." It is theorized here that renin and subsequently angiotonin produce vasoconstriction of the peripheral arterioles, and also of the arterioles of the opposite kidney. After this effect exists too long, the good kidney is thought to secrete renin, renal arteriolar-scleroses develops, and the process is irreversible in spite of removal of the primarily affected kidney. Pyelograms and function tests of the good kidney may be negative in spite of the vascular changes. The hypertension is thought to continue to exist then due to the disturbed hemodynamic pressure of the apparently normal kidney. Considerable caution should be exercised before deciding on nephrectomy with the hope of reducing the blood pressure in these cases of unilateral kidney disease.

Prognosis

The prognosis of hypertension depends on a number of factors. Sex plays a part in that it is well known that the female stands hypertension much better than the male, due perhaps to usually inheriting better arteries. The family

history is also important, for frequent deaths from arterial disease in his family makes the prognosis worse for the individual with hypertension: The height of the blood pressure is also a factor, since marked hypertension means a severe grade of vasospasm.

The most frequent causes of death from hypertension are congestive heart failure, coronary artery disease, cerebral hemorrhage, and uremia, in the order of frequency. Therefore, in determining the prognosis of the hypertensive patient, the condition of three systems must be thoroughly investigated, namely, the cardiac, arterial, and nephritic systems.

Heart

Well known symptoms and signs of congestive and anginal heart failure must be inquired into. Dyspnea, or precordial pain, on exertion is probably the earliest symptom. The amount of enlargement of the heart in relative proportion to the amount of hypertension should be estimated. The smaller the heart in proportion to the hypertension, the better the prognosis. Exercise, or cardiac function tests to determine cardiac function, such as stepping up and down two measured steps according to the technique of Master¹³ should give some idea of the heart condition.

Arteries

All peripheral arteries should be palpated for tortuosity, lateral pulsation, thickening, hardening, and beading. However, it must be remembered, these are relatively large arteries. About the only place where the condition of the arterioles can be studied in detail is in the eyegrounds. Here a great deal of information can be obtained about the condition of the arterial system. There are four types of changes in the arterioles, according to Wagener and Keith of the Mayo Clinic.⁹ In the first type, the prognosis is good, while it becomes increasingly worse in types II, III, and IV. (These are best illustrated in the following slides.) In the first group, the retinal arteries show mainly minimal narrowing. In the second group, there is arteriovenous compression, and moderate scleroses of the arterioles. In the third group, the retina shows recurrent angiospasm, arteriolar-scleroses, hemorrhages, and exudates, but with no papilledema of the disc. In the fourth group, the changes are similar to group three, but with papilledema.

One of the best indexes into the condition of the arteries is the flexibility of the blood pressure.¹⁰ A blood pressure which fluctuates as much as 50 points means that the arteries are

still not too badly damaged structurally and still capable of vasodilation. The response of the blood pressure to vasodilator drugs, sedatives, and rest, is a good indicator of the condition of the arteries. A blood pressure which responds very little to these indicates that too much structural damage has already taken place in the arterial system.

Kidneys

Nocturia is a frequent symptom of hypertension and with occasional albuminuria, does not necessarily mean kidney disease. Persistent albuminuria in the absence of congestive heart failure, with loss of flexibility of the specific gravity of the urine as determined by dilution and concentration kidney function tests, mean kidney damage. Phenosulphothalein and urea clearance tests, and N. P. N. and creatinine tests of the blood give some idea of kidney function.

Finally, urological investigation of the kidneys with intravenous or retrograde pyelograms, gives the final word in certain urological conditions of the kidneys. Frequently such conditions are present where not suspected.

Treatment

The treatment of hypertension, both medical and surgical, is unsatisfactory. The brightest outlook for a specific remedy at present is in the possible development of the anti-pressor substance from the kidney as extracted by Page, Grollman, and others.

The surgical treatment of hypertension by sympathectomies of various types is not the answer to the problem. Allen and Adson in surveying 450 cases subjected to sympathectomies at the Mayo Clinic report the lowering of the blood pressure was excellent in 13%, fair in 18%, not affected in 30%, and only temporary with return to preoperative levels in 39%, however, in 80%, the symptoms were relieved regardless of the post operative blood pressure, and this seems to be the most encouraging result from sympathectomies. The cases must be selected carefully preoperatively to expect good results. There must be little if any damage to the heart, kidneys, or arteries. The blood pressure must be very labile, dropping to normal, or near normal, following intravenous pentothal sodium, sodium amytal by mouth, or sodium nitrite in repeated doses.¹⁰ A thorough trial of medical treatment should be instituted before surgery is finally resorted to.

Better results are reported by Woods and Peet^{11 12} of Ann Arbor, Michigan, of 350 cases

in which a different type sympathectomy was done. They report a survival rate of 33% of malignant hypertension following this operation after five years, as compared to 99% mortality rate in a similar group treated medically, after five years.

Page⁶ has shown that sympathectomies do not correct the arteriolar vasoconstriction responsible for hypertension. Following sympathectomy, there is a stasis of venous blood in the splanchnic veins which decreases the volume of blood returning to the heart from the venous bed. Blood pressure may be lowered as a result of actual decrease in volume of blood pumped into the arterial tree.

Sympathectomy is probably justified in rapidly progressive hypertensive cases, since it seems at least temporarily to stop the progress of the disease. The prognosis is better in young patients under 30.¹²

In unilateral kidney disease, there does not seem at present any yardstick to tell when hypertension is due directly to the kidney disease, whether incidental, or associated with vascular disease of the opposite kidney.⁸ The best chances for reduction of blood pressure following nephrectomy have been in cases of unilateral chronic atrophic pyelonephritis,¹⁰ although even here results are not consistent. Variable results of reduction of blood pressure have been reported following nephrectomy in unilateral hydronephroses, stones with and without infection, and many urological conditions.

It might be well to emphasize here that urological disease of children such as pyelitis, pyelonephritis, and those due to obstructive lesions of the urinary tract, should be thoroughly investigated at the time of discovery, and cleared up, to prevent later in life the syndrome of hypertensive disease. Intravenous, or retrograde pyelograms may be necessary. Infections should be thoroughly eradicated by use of the powerful urinary antiseptics now at our disposal, such as the sulfa drugs, and mandelic acid.

In the medical treatment of hypertension, the psychic element must be strongly considered in the apparently benign type producing no symptoms. In these cases, a thorough investigation of the heart, kidneys, and arterial system should be done. If found in good condition, and the blood pressure not reaching too high levels, strong reassurance should be given these patients about the improbability of strokes, heart or kidney failure. Reassurance in itself will do more toward preventing the patient from be-

coming "blood pressure minded" than any other treatment.

In overweight patients, reduction of the weight will sometimes cause considerable reduction in blood pressure. In others, while it may not materially lower the blood pressure, reduction of weight should perform a double function by taking a strain off both the digestive and circulatory systems.

In the treatment of the moderately severe case, a regular program of work and relaxation with attempts to avoid anxiety and fear are beneficial. Potassium sulfocyanate seems to be the most reliable drug, lowering the blood pressure in about half of the cases twenty or more points.¹⁰ Blood concentrations of the drug must be checked at frequent intervals, at first every three or four days, and then once a week or longer. (There is a simple inexpensive apparatus for doing this now put out by one of the pharmaceutical houses.)¹⁴ Effective blood concentrations vary from 6 to 12 mg. per 100 cc., although a few patients get results at lower levels than this. The average daily dose is 6 to 9 grains for the first 4 to 7 days, followed by 3 to 6 grains or more daily until the desired blood concentration is reached. Toxic symptoms do not usually develop until the blood concentration reaches 15 mg, but in susceptible individuals, may occur with low levels of the drug. It must therefore be administered with some caution. Toxic symptoms consist of weakness, nausea, dermatitis, mental confusion, and many others. Sedatives, barbiturates and bromides, and nitrites are perhaps the next best drugs. Although not as effective as the cyanates they produce much less toxic effects. Aminophyllin is only weakly effective. Sympathectomy must be seriously considered in a certain number of these moderately severe cases who do not respond to medical treatment, and seem to progress rather rapidly.

Treatment of malignant hypertension is the despair of every practitioner. A small percentage of them may be suitable for sympathectomy. Morphine must be resorted to frequently to control headache. Fifty percent glucose solution and 10% magnesium sulfate solution intravenously to control eclampsia, or epileptiform convulsions, may have to be used. Pentothal sodium intravenously, and sodium amytal by mouth, is frequently needed, to lower blood pressure.

Summary

There is considerable fluctuation of normal blood pressure, and too rigid a level cannot be

fixed. The diastolic pressure is more important than the systolic.

A classification of hypertension is not satisfactory at present due to the undetermined etiology of essential hypertension.

The arguments for and against renal ischemia as a cause for essential hypertension are presented.

The prognosis of hypertension depends on the condition of the cardiac, arterial, and nephritic systems, and the level of blood pressure.

The medical and surgical treatment of hypertension is discussed.

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TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

THE possibility of the spread of tuberculosis within the family because of close contact, cannot be too strongly stressed. The disease may attack as many as four generations. However, this should not obscure the importance of continuing the search for contacts outside the immediate household when case finding does not reveal the source of infection within the family.

PULMONARY TUBERCULOSIS RESULTING FROM EXTRA-FAMILIAL CONTACTS

In mass surveys there is not the opportunity for individualization of cases that is necessary to discover extra-familial sources of tuberculous infection. Rural communities with low death rates have afforded excellent opportunities for demonstrating the importance of extra-familial contact in the spread of tuberculosis in the community.

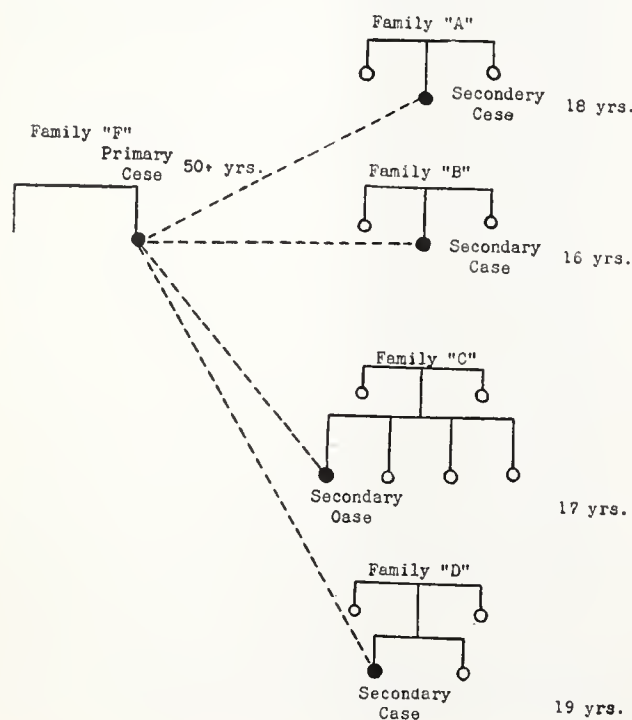
In Massachusetts a five-year survey on the control of tuberculosis was recently conducted in a county considered to be representative of a rural New England community, and with next to the lowest death rate from pulmonary tuberculosis of any county in the state.

It was during this survey that attention was focused on the importance of extra-familial contact. The diagram here shown is a graphic representation of the spread of tuberculosis among several families in the same community. The discovery of the source of infection required a considerable period of time and a careful evaluation of certain obscuring factors.

In March, 1935, and August, 1936, two cases of pulmonary tuberculosis were reported in a small community of approximately 4,000 persons. Both cases were high school girls, aged 18 and 16 respectively. They were the only young persons in their respective homes. Members of family "A" were examined and were found to have no evidence of tuberculosis. Family "B" refused examination at the time, but were subsequently examined and found to be negative for tuberculosis. There was no history of tuberculosis in either of the families. Both households used raw milk from tuberculin-tested herds, but obtained from different dairies. The two girls were not "chums" but attended the same high school.

A check with the school physician revealed that none of the teachers had tuberculosis, with the possible exception of one. She had suffered from pulmonary tuberculosis two years prior, but was discharged from the sanatorium as an arrested case. However, because several of the pupils complained that this teacher coughed during her classes, several sputum examinations were made by the school physician, all of which were found to be negative.

The situation rested at this stage until April, 1937, when a 19-year-old girl, graduated from



the same high school in 1936, was found to have tuberculosis. Careful inquiry revealed that she had little or no contact with either of the other girls at the school. She had, however, taken two courses given by the teacher who was under suspicion. A check-up by X-ray in her family showed no evidence of active tuberculosis, nor was there any family history of the disease.

Again the evidence pointed to someone in the high school as a potential source of infection for these three girls. The teacher, aware that she was under suspicion, returned to the sanatorium for a check-up. A negative report was received by the school physician from the sanatorium.

In December, 1937, a fourth girl, aged 17, was found to have pulmonary tuberculosis. She too, had had the same teacher in some of her classes. She knew all three of the girls but denied close friendship with them. Her family was examined by X-ray by a local physician who reported negative findings. Subsequent examination of these films confirmed the original report. At this stage there seemed to be almost overwhelming evidence that these girls had had a common source of infection, and the logical place to search seemed to be in the high school.

Further visits were made to the families to recheck their contact histories. They had all used raw milk from tuberculin-tested herds, but only two of the families took milk from the same dairy. During one of these visits to family "C" a casual remark opened a new approach to the problem.

It was found that all four families attended the same church. This was a remarkable coincidence. A rough statistical calculation placed the church under strong suspicion on the basis that in the school population considerably less than one-half of one case would be expected to have occurred by chance among this religious denomination if the source of infection were in the school. Inquiries regarding attendance of the girls at the church, revealed that three of them sang in the choir and all four of them had attended social functions on numerous occasions.

A careful check-up of the reported cases and deaths in the community failed to show any of them to be members of this church. However, during the investigations relative to the church membership it was learned quite by accident that the wife of the former minister had developed pulmonary tuberculosis and had entered a sanatorium in another state within three months after leaving the parish, early in 1936.

This rumor was checked and found to be authentic. In fact, at the time of admission to the sanatorium the minister's wife was found to have tuberculosis in an advanced stage and her sputum was markedly positive.

Further inquiry revealed that the minister's wife also sang soprano in the choir and took communion from a common cup before three of the girls who sang in the choir, as well as before the fourth who was not a choir member. Thus, a common source of infection was found for these four girls in their fellow church member. On the basis of X-ray, sputum examination and statistics, the school teacher, an arrested case, was eliminated from suspicion.

Aside from determining the true source of infection for these four girls, several other factors of epidemiological significance are manifested. In this particular instance, the range of age was from 16 to 19 years and all cases were girls, again revealing the importance of age and sex. However, there is also evidence at the present time to show that the age of highest mortality from tuberculosis is gradually shifting to the older age groups.

A further factor of importance is that three of these girls had positive sputum at the time diagnosis was made; two of them were moderately advanced and two far advanced at the time of diagnosis.

There was a high fatality rate. Two of the girls have died; one remains in a sanatorium and the fourth has been discharged from the sanatorium as an arrested case.

Although three of the girls sang in the soprano section of the choir, there was ample opportunity for contact between the fourth girl and the minister's wife through social functions and Sunday School. These contacts were regular, usually once or twice a week, over a period of several years.

The question of the common communion cup is a moot one. It is reasonable to suppose that droplet infection through contact at choir practice and social functions might well be sufficient to result in active disease. The dosage of infection was probably large if consideration is given to the cumulative effect resulting from frequent exposures at fairly regular intervals.

Failure to find the source of infection within a household should not preclude further attempts at finding the source case.

Pulmonary Tuberculosis Resulting from Extra-Familial Contacts, C. W. Twinam and Alton S. Pope, *Amer. Jour. of Pub. Health*, Nov. 1942.

The President's Page

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"THE DOCTOR'S READING"

The doctor is confronted with making a living and also with making a life. Some of us are so busy making a living that we neglect the making of a life. In attaining both of these objectives, reading is very essential.

There are three types of reading necessary for the doctor. He must, as a modern citizen, keep informed, through the daily press and through current magazines, about things that are happening in this troubled world in which he is at present living. Then, as a doctor, he must be a constant student of current literature which has to do with progress in his field of work. Finally, he is interested in the literature of the past, both in his field of work and out. He is interested in literature that has stood the test of time. A Bulwer-Lytton quotation reads like this: "In science, read by preference, the newest works; in literature, the oldest. The classic literature is always modern." I also like the quotation of Charles Lamb: "I love to lose myself in other men's minds."

Far be it from me to be an authority on what is good and what is bad, but it seems to me that the following volumes will prove helpful to any doctor. Incidentally, a number of these make excellent gifts for our fellow-physicians who are in service.

The Bible would have to be first on any list because it has been the best-seller all down through the ages. In it are found the answers to the problems of the world. Any doctor will profit by acquaintance with it. Dr. Charles W. Eliot's "Harvard Classics" contain the writings of the immortals. "Religio Medici" by Sir Thomas Browne is truly a classic. "Aequinimitas and Other Addresses" by Sir William Osler is an inspiration to any doctor. "Confessio Medici" by Stephen Paget is a good companion. "The Life of Osler" by Harvey Cushing is magnificent. Other biographical works that are stimulating reading are "The Beloved Physician" by R. M. Wilson and "J. B. Murphy, Stormy Petrel of Surgery" by Dr. Loyal Davis. These, by no means, exhaust the list.

We complain that in our busy lives, especially now, so little time is left for reading. That is true to a great extent, but we are reminded of the letter written long ago by Lord Chesterfield to his son in which he said, "I most earnestly recommend to you the use of those minutes and quarter of hours, in the course of the day, which people think too short to deserve their attention; yet, if summed up at the end of the year, would amount to a very considerable portion of time."

R. B. ROBINS, M. D.,
President.

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EDITORIALS

THIS IS A HOME-FRONT JOB

601 Coast Artillery (A-a),
Philadelphia, Pennsylvania,
February 18, 1943.

To the Editor:

In order that Dr. Foltz may not get a monopoly on filariasis and allied conditions, I have been in Washington since January 1st taking a two months course in tropical medicine. I will finish in another ten days and perhaps will soon be in a climate where such knowledge can be applied.

It is not the purpose of this letter to talk of personal interests, however, but rather to mention something which is, although apparently well known, but perhaps not considered in a serious mood. I am referring to the increasing threat of socialized medicine.

During my two months here in the nation's capital, I have met doctors from all sections of the country and many of them already feel that most of us will never return to a private practice with free choice of location, patients, etc. It is hard for me to believe that American med-

ical men will ever accept such regimentation as I thought we were fighting for free principles.
A man in the service cannot do much against such a threat as he does not have the time, and would probably be told to confine his energies to the war, if he started to do anything. I sincerely hope we are not going to forsake freedom in the practice of medicine.

Yours very truly,
O. B. Barger, Capt. M. C.

THE 1943 ANNUAL SESSION

The Sixty-eighth Annual Session of the Society will be held at the Marion Hotel, Little Rock, April 19-20th, 1943. Due to general conditions, the Council decided to have a two-day session this year rather than the usual three-day session, thus permitting members to attend without loss of an additional day's time from practice. While gasoline rationing and the need for restriction in the use of tires will cause some inconvenience to members, it is felt that the central location of Little Rock will permit members to attend a session in that city with a minimum loss of time from home and at no great personal inconvenience for transportation.

While curtailment of national scientific meetings has been requested, there is no disposition to interfere with activities of medical organizations within the state. Medical progress is most active during war and it is imperative that the civilian and home front physician be enabled to acquire information of the newer advances and technics. The state society meeting affords the most satisfactory opportunity for every physician to refresh his knowledge with the information which the armed forces are in a position to furnish.

The preliminary program and announcements will appear in the April issue of The Journal. It is suggested that members make advance hotel reservations as facilities are crowded in the convention city.

RELOCATION OF PHYSICIANS

Procurement and Assignment Service in Arkansas has the responsibility of providing physicians in those areas where there is an actual shortage. This is an added responsibility for the service but one which requires the full co-operation of the organized medical profession. Every effort will be made to provide, on a voluntary basis, physicians where they are actually needed within the state. Should the volunteer plan fail, it is not unreasonable to predict that

some compulsory plan may be adopted. Conferences have already been held in several communities where a physician shortage has been reported. It is the opinion of the medical profession which has attended the conferences that physicians are needed in certain of these areas. Procurement and Assignment in Arkansas now seeks physicians willing to relocate themselves in order that the citizens may better be served. One such relocation has been accomplished.

While there is no great excess of physicians within the draft ages in any area in Arkansas, there are physicians now located in areas of ample physician supply, who could be spared from their present communities to serve areas in real need of a physician.

There exists, at this time, a need for physicians who will volunteer for relocation within the state. Such physicians are assured that by such change of location they will contribute materially to the war effort and will assist the profession to provide for the health needs of the people of the state on a voluntary basis. It is felt that the areas in which need exists offer exceptional opportunities for qualified, willing physicians.

It is urged that physicians willing to relocate communicate with the state chairman, Procurement and Assignment Service, 610 First National Building, Fort Smith, at once.

ARMY-NAVY E AWARDED TO WINTHROP CHEMICAL COMPANY

About a thousand employees and distinguished guests attended ceremonies at the plant in Rensselaer, N. Y., and at the offices in New York of the Winthrop Chemical Company, at which the Army-Navy E was presented to the Winthrop Chemical Company, which is manufacturing many vital drugs for the armed forces, among which is atabrine, synthetic substitute for quinine in the treatment of malaria. Atabrine is being manufactured in the United States today, said Dr. Theodore G. Klumpp, president of the company, at a rate of nearly one billion tablets a year. The flag was accepted for Winthrop's plant at Rensselaer by the plant superintendent, Dr. A. E. Sherndal. Dr. Klumpp in New York accepted the flag on behalf of the management. The principal speakers at the ceremonies were Brig. Gen. Charles C. Hillman of the Surgeon General's Office, Washington, D. C.; Rear Admiral Charles S. Stephenson of the Bureau of Medicine and Surgery, U. S. Navy; Dr. Morris Fishbein, editor of The Journal, and Lowell Thomas.

PROCEEDINGS OF SOCIETIES

Jefferson County Medical Society has elected the following officers: President, W. H. Bruce; Vice-president, B. D. Luck, Jr.; Secretary-treasurer, Fred Hames; Delegate, J. S. Jenkins, and Alternate, Fred Hames. The Society remitted the 1943 assessment of its members in military service on January 28th.

Miller County Medical Society has elected the following officers: President, W. Decker Smith; Vice-president, N. B. Daniels; Secretary-treasurer, H. K. Abrams; Delegate, R. R. Kirkpatrick, and Alternate, B. C. Middleton.

The Pulaski County Medical Society was addressed February 1st by Robert Watson, "Report of a Case of Brain Tumor," and John Miller, "Experiences in China."

Elizabeth Fletcher, Secretary.

The Ouachita County Medical Society met in regular monthly session at the Camden Hospital February 4th. The following program was rendered: "Aviation Medicine," Captain John Lary; "History of Military Medicine," Lt. James Donovan, and "Trichomonas Vaginitis" and "Vitamins" (motion pictures).

R. B. Robins, Secretary.

Mississippi County Medical Society was addressed February 2nd by Harold Boyd, "Osteomyelitis," and Phil Schruer, "Pelvic Pain," both speakers of Memphis.

M. L. Skaller, Secretary.

Johnson County Medical Society has elected the following officers: President, Earle H. Hunt; Vice-president, Geo. L. Hardgrave, and Secretary-treasurer, G. R. Siegel.

Greene County Medical Society has elected the following officers: President, J. J. Hudgins; Vice-president, J. A. Dillman; Secretary-treasurer, W. M. Lamb; Delegate, R. J. Haley, and Alternate, Earle D. McKelvey.

Phillips County Medical Society has elected the following officers: President, H. H. Rightor; Vice-president, J. W. Butts; Secretary-treasurer, J. T. Herron; Delegate, J. T. Herron, and Alternate, A. W. Cox.

Arkansas County Medical Society has elected the following officers: President, Homer Dick-

ens; Vice-president, Arthur Fowler; Secretary-treasurer, R. H. Whitehead; Delegate, M. C. John, and Alternate, E. B. Swindler.

Lafayette County Medical Society has elected the following officers: President, F. E. Baker; Vice-president and Secretary, A. W. Keith; Delegate, A. W. Keith, and Alternate, R. L. Armstrong.

Randolph County Medical Society has elected the following officers: President, J. W. Ryburn, Pocahontas; Vice-president, J. E. Smith, Reyno; Secretary-treasurer, M. A. Baltz, Pocahontas; Delegate, J. R. Loftis, Pocahontas, and Alternate, J. W. Brown, Pocahontas.

The Miller County Medical Society was addressed February 19th by Joe D. Nichols, Atlanta, Texas, on "Intravenous Anesthesia."

H. K. Abrams, Secretary.

RESOLUTION

WHEREAS, in the course of human events our esteemed colleague, Dr. W. A. Snodgrass, has been removed from our Society, we, his brethren, mourn;

WHEREAS, at the call of his country in World War I he gave, as a true patriot, himself and his financial resources;

WHEREAS, he gave freely of his time and ability to the cause of medical education and the promotion of laws to protect the people against charlatans and quacks;

WHEREAS, his faithful observance of the tenets of medical ethics and his readiness to answer to the call of the poor and distressed were an example to his colleagues,

NOW; BE IT RESOLVED, that the Pulaski County Medical Society emulate his virtues and express to his family its heartfelt sympathy in the loss they have sustained and that a copy of this Resolution be spread upon the minutes of this meeting, a copy sent to his family, and a copy to the Journal of the Arkansas Medical Society.

CONTRARY TO RUMORS

The potency of Mead's Oleum Percomorphum 50% with Viosterol remains the same; namely, 60,000 vitamin A units and 8,500 vitamin D units per gram. MEAD JOHNSON & CO., EVANSVILLE, IND., U. S. A.

PERSONALS AND NEWS ITEMS

E. F. Ellis and Vincent O. Lesh have been elected directors of the First National Bank at Fayetteville.

BORN—On January 17th, a daughter, to Lt. and Mrs. Ben H. Pride, formerly of Fort Smith, now stationed at the Army Air Base, La Junta, Colorado.

BORN—On January 3rd, a daughter, to Lt. and Mrs. G. F. Stocker, Fort Smith. Lt. Stocker is now on duty with the Navy in the South Pacific.

C. W. Jones, Benton, took special work at Tulane University during January and February.

Lt. John M. Hundley, Clarendon, has been transferred from duty with the Office of Naval Officer Procurement, San Francisco, to duty with the fleet.

W. Myers Smith, Little Rock, has been appointed Lieutenant, Medical Corps, Army of the United States, and assigned to 2nd Section, 19th Officers' Training Class, Carlisle, Pennsylvania.

Comdr. H. A. Higgins, Little Rock, has been appointed to rank of Captain, Naval Medical Corps.

H. E. Mobley has been elected a director of the Morrilton Chamber of Commerce.

R. O. Norris has been elected vice-president of the Bank of Tuckerman.

J. L. Grace, Bellville, has been promoted to Major, Medical Reserve, United States Army, and is now assigned to 563 Sig. A. W. Bn., Drew Field, Tampa, Florida.

W. T. Moore has moved from Everton to Marshall where he will be associated with Drs. Bing and Evans.

W. H. Toland has been appointed health officer for Howard county.

C. McA. Wassell, Little Rock, has been promoted to Commander, Medical Corps, United States Navy.

W. G. Hancock has been appointed health officer for Cleveland county.

Major S. S. Kirkland, Camp Barkley, is taking a course in traumatic and orthopedic surgery at Columbia University, New York.

Major Daniel H. Autry addressed the Station Hospital staff meeting, Camp Robinson, February 11th, on "Discussion of Coronary Occlusion."

C. P. Sisco has been elected a director of the First State Bank at Springdale.

Major J. O. Boydstone, Hot Springs National Park, has been transferred from Camp Polk, Louisiana, to Indiantown Gap Military Reservation, Pennsylvania.

A. C. Modelevsky, Jonesboro, has been re-appointed health director for Craighead County.

The State Board of Health has elected the following officers: President, W. G. Hodges, Malvern; Vice-president, F. O. Mahony, El Dorado, and Executive Secretary, W. B. Grayson, Little Rock.

W. B. Grayson, Little Rock, recently attended the sessions of the State and Territorial Health Officers Association, of which he is president, at Baltimore.

Lt. Jack R. Ellis, Hot Springs National Park, recently completed the course at the School of Aviation Medicine, San Antonio.

V. R. Fox has moved from Leachville to Manila.

F. E. Baker, Stamps, has been elected Vice-President of the Bodcaw Bank for the 27th year.

Lt. Ewing M. Nixon, Little Rock, is now on duty with a station hospital in the Pacific.

The following have graduated from the army course in aviation medicine: Lt. Jim McKenzie,

Hope; Lt. James O. Pierce, Marked Tree, and Lt. Hugh W. Savage, Little Rock.

R. J. Calcote, Little Rock, now stationed at San Francisco, has been promoted to Commander, Naval Medical Corps Reserve.

OBITUARY

JAMES M. LEMONS, age 80 years, died at his home in Pine Bluff February 3rd after a prolonged illness. Born in Crockett county, Tennessee, he attended the schools of the county, and after a period of time spent as a dry goods clerk and as a bookkeeper, he graduated from the Memphis Hospital Medical College in 1893. He first practiced in Tennessee, later in Louisiana and Oklahoma and came to Arkansas in 1896. In 1911 he moved to Pine Bluff to serve as physician for the Long-Bell Lumber Company, a connection he held until his death. He had long been active in the affairs of the Methodist church, first representing his church at a district conference when eighteen years old. He had served as steward for fifty years and had been head usher of the First Church at Pine Bluff for many years. He was married to Miss Izora Young in 1886 and their two daughters survive him. In the Arkansas Medical Society he served as president of the Jefferson County Medical Society for four years and as its delegate for many sessions of the House of Delegates. He had been a councilor and was the first president-elect of the Society, being elected in 1925 to serve as president in 1926-27. The Society made him an honorary member in 1933.

GEORGE W. RINGGOLD, age 74 years, died suddenly in his office at Gould January 26th. Born in Illinois, he graduated from the University of Arkansas School of Medicine in 1886 and first practiced at Conway and Dermott, locating in Gould in 1926. Surviving relatives are his wife, two daughters and a son.

CHARLES AUGUSTA CALDWELL, age 62, died at his home in Blytheville February 8th after an illness of two months. Born in Marquand, Missouri, he graduated from Barnes Medical College in Saint Louis and first practiced at Bay. He located at Blytheville in 1911. Surviving relatives are his wife and one son.

RANDOM THOUGHTS OF THE SECRETARY

January 21st. Reading the annual report of the Conway Memorial Hospital in the Conway News we are interested in learning that 757 patients were admitted in 1942 against 651 in 1941 and that total revenues in 1942 were \$37,559.83 against \$27,036.14 in 1941. Should you have handy an Arkansas Gazette of November 24th, you can find another statement on the activities of the hospital. Procurement and Assignment remains "snafu."

January 27th. This day conferring over the possibilities of Bauxite becoming a critical medical care area, listening to the opinions of the medical profession, of management, of labor, and of government representatives with what we are pleased to call sympathetic attention. Hearing naught but praise for the work of Harrell, the reward of a good job well done. Homeward, taking leave of Grayson, who mutters something about another conference, we meet Commander Olds, of procurement legend, on the train, and note the ease with which he gets rid of his troubles, prompting us to suggest to Grayson that he seek this happy faculty.

January 23rd. Today we see a horse frightened by an automobile—a sight we had never expected to see again.

January 24th. Again the guests of Stanley Gates at Chaffee Officer's Mess where the chef puts on a decorative and substantial luncheon and subsequently teaches us the fine art of dissection as practiced in deboning a ham. Later Shippey on short leave from Fort Jackson comes by to give us later incidents in his experiences with numbered station hospitals, a service with which he is becoming most familiar.

January 29th. In the company of Wolfermann, Earle Hunt and Everett Moulton traveling to Rogers where the McNeils entertain in what has become an occasion of the year, honoring the 92nd birthday of W. J. Curry, now 68 years in practice, and even yet younger than anyone else at the party.

February 7th. By long distance Fletcher and Wolfermann heckle us today from Hot Springs over the Democrat's article, "Give The Doctor A Break." This we can take in our stride but if communities ask us for doctors, it's a vacation!

February 8th. Further distinguishing himself, McCurry comes forth with swanky window envelope stationery as secretary of the Craighead-Poinsett County Medical Society. Another county secretary, Elizabeth Fletcher, adds to the general good will in our office by sending Pulaski County's remittance of 1943 membership assessments for 58 of their members now with the armed forces, a commendable action by this county society.

February 11th. Once again with the Benton County Society, this time being served our full dinner without complications, Pickens being in the Navy and not there to usurp. Homeward with Chamberlain and Crigler, seeking directions from a cab driver in Fayetteville in order to pick up the ladies, Crigler, with magnificent disregard of instructions and supremely egotistical in his belief that he could find the house, wanders west of the stadium, identifies the Field House as a dairy barn, turns right when directions were left, crosses a 10-acre field, comes into Bates Addition and stops at THE house, an accomplishment which should exhaust his store of lady luck for the duration and which leaves us the unusual mission of "eating our thumb," our vow should it be the right house as well it was.

February 18th. Today discussing the medical care situation in Osceola where Thos. F. Hudson aptly points out that a shortage of physicians confronts several areas, none of which suffer more than any other. After lunch

at the "Rustic Inn," which serves the second best hot rolls in Arkansas, motoring into Memphis with Grayson, and observing Stevenson, a shovel in his hand, a Victory Garden at his feet, by his home in West Memphis. Driving about Memphis in the late afternoon the highway marker is noted which reads "Hernando 23 miles" and we bet I. F. Jones would trade places with us, at any cost, now. Returning on the Rock Island it seems that we alone have Pullman space since the rest of the passengers argue it out with the conductor as they all stand by our berth.

WOMEN'S FIELD ARMY TRAINING SCHOOL

The first training school for officers and co-workers of the Arkansas Division, Women's Field Army, was held in Jonesboro, February 4th with an attendance of 46. The women attending were County and City Commanders and their co-workers from the eight counties composing the First District, of which Mrs. O. T. Cohen of Jonesboro, is Commander. This district was awarded the first training school because of its splendid response in the 1942 campaign.

The scientific program was held in the morning by Dr. Shields Abernathy, of Memphis, and Dr. Fred Hames, of Pine Bluff, Chairman of the Committee on Cancer Control of the Arkansas Medical Society, who discussed research and treatment in the field of cancer. At luncheon there was a round-table discussion.

Mrs. W. R. Brooksher, State Commander, was in charge of the afternoon session which was given to discussion of the various aspects of the program of the Women's Field Army: Education, Publicity, and Methods of conducting an Enlistment Campaign.

Under the joint auspices of the Women's Field Army and the Craighead-Poinsett County Medical Society, a free diagnostic clinic was held in the afternoon at the St. Bernard's Hospital with Drs. Abernathy and Hames assisting. 112 persons registered for examination, of which 40% were found to have cancer.

The interest in the educational program of the Women's Field Army as manifested by the attendance at the school of representatives of eight counties and the registration at the clinic of so great a number of people was most gratifying to those who had given of their time and effort toward the success of the school. The cooperation of the members of the Craighead-Poinsett County Medical Society with Mrs. O. T. Cohen and her committee gave impetus to the hope in the mind of the State Commander that we may look forward to more schools, more clinics, to the ultimate success of the program of the Arkansas Division, Women's Field Army.

WOMEN'S AUXILIARY NEWS

The Woman's Auxiliary to the Pulaski County Medical Society met February 17th, at the home of Mrs. Pat Murphey. Co-hostesses were Mrs. Homer Higgins, Mrs. N. W. Reigler and Mrs. Byron L. Robinson. The meeting was preceded by a luncheon. Mrs. Carl A. Rosenbaum presided over the business meeting. Mrs. Higgins, Chairman of the Sewing Committee, reported that this committee in the past month had put in 413 man hours at the Camp Robinson Day Room furnished by the Auxiliary, and had, in that time, altered 267 garments for the men. Mrs. Charles A. Henry enlisted the services of enough volunteers to man for one week a grocery store in which these volunteers are to assist the grocer in acquainting customers with the food rationing plan.

Mrs. R. T. Smith introduced the guest speaker, Ensign Corabel Hamilton, WAVES, who addressed the meeting on the activities of the WAVES enlistment program now in progress in Arkansas.

BOOK REVIEWS

Bacteriology Laboratory Methods. By E. S. King, M. D., Professor of Bacteriology in the Bowman Gray School of Medicine of Wake Forest College; Bacteriologist to the Baptist Hospital, Winston-Salem, N. C. Pp. \$2.50. Charlotte, N. C. Charlotte Medical Press, 1941.

In his manual of Bacteriology Laboratory Methods, Dr. King has presented a compact and interesting little book. Too often in books of this sort the author is inclined to go into procedures which are not practical from the point of view of the smaller laboratory but for the most part the material presented here is essentially practicable.

In assembly the volume is divided into three general groups: Part One, General Laboratory Procedures, gives in brief a collection of data varying from how to clean glassware for various purposes to the preparation of the more frequently used laboratory stains and culture media. His selection of formulae is quite comprehensive and covers those to which a laboratory worker would be most likely to refer.

Part Two is headed Introductory Bacteriology and Serology and deals with water and milk analysis and briefly (3 pages) with some fundamental serum reactions. The milk and water analysis procedures seem well synopsized and are narrowed somewhat to be adaptable to medical bacteriology. The fundamental serum reactions consist of methods for the demonstration of hemolysin, bacteriolysin, and opsonins.

Medical Bacteriology and Serology are taken up in Part Three with a brief method of study for the more important pathogens. The too often neglected yeasts and fungi are taken up, briefly to be sure, but with the presentation of several interesting and informative facts. In the serological discussion the Kolmer complement-fixation reaction is gone into with some detail as are the Kahn and Kline flocculation tests.

The book is presented in such a way as to be applicable for use as a guide in a student laboratory. However, from the viewpoint of a hospital laboratory it it would be preferable if there were less experimental presentation and more practical application.

Annual Reprint of the Reports of the Council on Pharmacy and Chemistry of the American Medical Association for 1941, with the Comments that Have Appeared in The Journal. Chicago: American Medical Association, 1942. Price \$1.

The Council on Pharmacy and Chemistry recently issued the thirty-third edition of the Annual Reprint of the Reports of the Council on Pharmacy and Chemistry of the American Medical Association. This volume contains in compact form not only the reports of the Council which have been published in THE JOURNAL during the past year but also some additional reports which were not considered of sufficient importance to be published in THE JOURNAL. The reports may be divided into four classes: reports rejecting products as not being acceptable for inclusion in New and Nonofficial Remedies, reports omitting from New and Nonofficial Remedies products that have previously been accepted, reports on the nomenclature of various substances and reports in which the Council gives decisions of general interest or summarizes the latest scientific knowledge concerning certain topics. The last classification includes the largest number of reports. One article deals with the developments in bacteriophage therapy since the previous report of the Council in 1934. Other reports bring to the present day the status of such products as aluminum hydroxide preparations, antipneumococcic serums, cyclopropane, human blood plasma and serum, human convalescent poliomyelitis serum, human convalescent mumps serum and sulfadiazine. Such topics as ion transfer (iontophoresis), halogenated vegetable oils for bronchography and the problem of lipid pneumonia and the sympathomimetic amines as epinephrine substitutes are discussed. The nomenclature reports deal for the most part with the Council's adoption of nonproprietary designations for comparatively new products such as diethylstilbestrol, menadione and sulfadiazine. Explanations are given for the omission at this time of products which have previously been included in New and Nonofficial Remedies. In most cases the N. N. R. description is included in the report as a matter of record. The volume also includes the reports rejecting various products—which have either been submitted by the manufacturer or considered on the Council's own initiative—and which have been found not acceptable for inclusion in New and Nonofficial Remedies. Also incorporated is a brief summary of the decisions arrived at by the Council at its latest meeting.

Military Surgical Manuals: Orthopedic Subjects. Prepared and edited by the Subcommittee on Orthopedic Surgery of the Committee on Surgery of the Division of Medical Sciences of the National Research Council. Pp. 306. Illustrated. Philadelphia: W. B. Saunders Company, 1943.

This is another of the military texts developed for the army and navy. Numerous orthopedic subjects as treatment of ununited fractures, compression and dislocated fractures of the vertebrae, osteomyelitis and infected compound fractures are discussed fairly completely. The practical points are stressed and most of the theory is excluded. The subject of osteomyelitis is especially well presented by J. Albert Keys who emphasizes the comparatively early operation for acute hematogenous osteomyelitis. His surgical technics are described in detail.

New and Nonofficial Remedies, 1942, containing descriptions of the articles which stand accepted by the Council on Pharmacy and Chemistry of the American Medical Association on Jan. 1, 1942. Cloth. Price, postpaid, \$1.50. Pp. 671—XCVII Chicago: American Medical Association, 1942.

Perhaps the most important feature of this new volume of New and Nonofficial Remedies is the radical rearrangement it has undergone, which it is believed will

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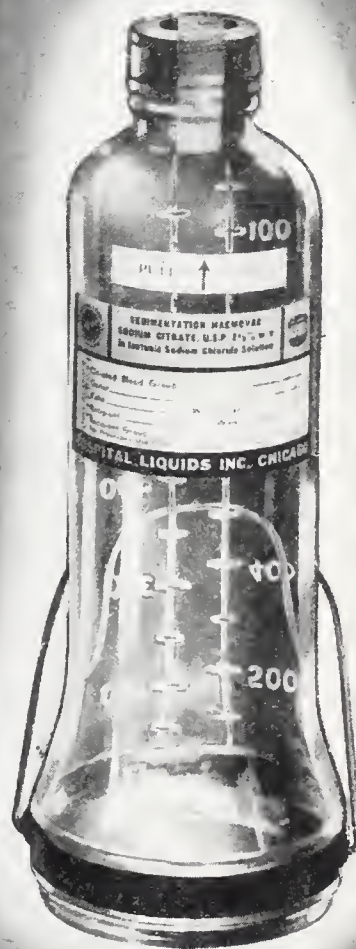
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make the contents more accessible and therefore more valuable to the physician or other interested readers. Heretofore, the classification of products has been basically that of chemical relationship—the new arrangement is primarily according to therapeutic use, chemical classification being introduced by means of subheadings. In addition, the typographic style has been changed so as to give greater prominence to the products of individual manufacturers. No valuable feature has been sacrificed. The book still fulfills its function of establishing chemical standards for new and nonofficial preparations which the Council has found to be useful or to give adequate promise of usefulness in the treatment or prevention of disease. Its function as a guide to the most recent advances in therapeutics has been greatly enhanced.

Careful examination of the general discussions under the various headings and subheadings shows that the Council has admirably performed its annual task of keeping the text abreast with the progress of medicine. The authoritative and compendious section of the sulfonamide derivatives is an outstanding example. So also is the chapter, Vitamins and Vitamin Preparations for Prophylactic and Therapeutic Use. Equally important though less extensive revisions have been made in such sections as Aluminum Compounds, Dextrose, Gonadotropic Substances, Liver and Stomach Preparations, Ovaries, Parathyroid, Pituitary, and Testes.

Among the newly accepted drugs are: Acetyl-Beta-Methylcholine and the proprietary brand, Mecholyl

Chloride, proposed for use by iontophoresis, orally and subcutaneously as a parasympathetic stimulant; Adrenal Cortex Extract for parenteral use in the treatment of Addison's disease or of adrenal insufficiency of other types as well as prophylactically in surgical procedures involving the adrenal cortex; Aluminum Hydroxide Gel with the proprietary brand, Creamalin, for oral use as an adjunct in the treatment of peptic (gastric and duodenal) ulcer; and Normal Human Serum and Normal Human Plasma.

Others worthy of mention are: Cyclopropane, another general anesthetic, now included in the U.S.P.; Amylcaine Hydrochloride, another proprietary local anesthetic and Pernoston Sodium, the sodium salt of the previously accepted proprietary barbitol derivative, Pernoston.

The indices of the new volume of New and Nonofficial Remedies are of the same order and plan as in previous editions. A general index lists accepted articles, including those not described. This is followed by an index to distributors in which appear all the Council accepted articles listed under their respective manufacturers. Finally, a bibliographical index is added for listing proprietary and unofficial articles not included in N.N.R. This includes references to the Council publications concerning each such article as has appeared in The Journal of the A. M. A., Reports of the Council on Pharmacy and Chemistry, Propaganda for Reform, Vol. 1 and 2, or Reports of the A. M. A. Chemical Laboratory.

Announcing The Seventh Annual Meeting of THE NEW ORLEANS GRADUATE MEDICAL ASSEMBLY MARCH 15-18, 1943

GUEST SPEAKERS

CARDIOLOGY:

DR. TINSLEY R. HARRISON, Winston-Salem

DERMATOLOGY:

To Be Announced

GASTRO-ENTEROLOGY:

DR. GEORGE B. EUSTERMAN, Rochester

GYNECOLOGY:

DR. ROBERT J. CROSSEN, St. Louis

INDUSTRIAL HEALTH:

DR. JAMES G. TOWNSEND, Bethesda

INFANTILE PARALYSIS:

SISTER ELIZABETH KENNY, Minneapolis

MEDICINE:

LT. COL. EDGAR V. ALLEN, Rochester
(Now of Omaha)

MEDICINE:

DR. LOUIS HAMMAN, Baltimore

NEUROLOGY:

LT. COL. R. G. SPURLING, Louisville
(Now of Washington, D. C.)

OBSTETRICS:

DR. NICHOLSON E. EASTMAN, Baltimore

OPHTHALMOLOGY:

DR. RALPH I. LLOYD, Brooklyn

ORTHOPEDIC SURGERY:

DR. EDWIN W. RYERSON, Chicago

OTOLARYNGOLOGY:

DR. JOHN J. SHEA, Memphis

PATHOLOGY:

DR. HOWARD T. KARSNER, Cleveland

PEDIATRICS:

DR. ERLING S. PLATOU, Minneapolis

RADIOLOGY:

DR. FRED J. HODGES, Ann Arbor

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The JOURNAL

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Vol. XXXIX

LITTLE ROCK, ARKANSAS, APRIL, 1943

No. 11

ALCOHOL: A PUBLIC HEALTH PROBLEM*

A. C. KOLB, M. D.
Hope

Public health activities the country over are concerned chiefly with the prevention of disease and prolongation of life. A great deal of money has been expended in this effort and notable results have been obtained. According to Vogel, of the United States Public Health Service the average expectation of life at birth has been extended from 38 years to 61 years since 1787. It is the fondest hope and desire of every individual to secure the greatest happiness and pleasure in life. Without good health, this is unobtainable. The ability of the individual to become a contented, law-abiding, self-supporting, and productive citizen is in direct proportion to the condition of his mental and physical health. The average mental or physical invalid is not only a problem to the family but to the community as well.

The public health authorities should be just as much interested in the incidence, invalidism, mental and physical, and mortality rate from alcoholism as that of typhoid fever, tuberculosis, diphtheria, and other infectious and contagious diseases. Up to the present time, in our state, but little attention has been paid to this problem outside our State Hospital and Criminal Courts. The average chronic alcoholic, because of his mental and physical deterioration, is lost to the community as a productive unit of society and becomes, instead, a liability because of his inability to support himself and his family, who become objects of support from the social agencies in his locality. Oftentimes, due to incurable mental diseases as a result of his drinking, he becomes a public charge in the State Hospital for the remainder of his life, the average cost of which is about \$300.00 per year.

It is now well recognized that alcohol is not a

stimulant but a narcotic instead. Its power to produce addiction approaches that of opium and its derivatives. This is especially true of the constitutionally unstable group of our population. Alcoholism as a public health problem cannot be treated separately from the social and economic phases any more than any other public health problem because all three are so closely interrelated that they involve the entire social structure. The end results and by-products of this condition are the concern of the entire population.

Etiological factors in drinking: Alcoholism, in all its different phases, is a symptom just as is fever. Why do people drink? There is a reason for it. Most students of the question agree that it is largely psychological. The following have been mentioned as causative factors in the production of the habit: (1) Chronic alcoholics are frequently seen in the home situation of an over-indulgent mother and a severe father. (2) It abolishes repression and becomes a tension release. (3) Some alcoholics drink to escape from unpleasant situations. (4) It is often the first symptom of a developing psychosis such as schizophrenia, manic-depressive psychosis, etc. (5) Some drink to enhance their social position. (6) Some drink to secure a sense of well-being.

Prevalence of drinking: There are no reliable figures as to the extent of drinking in the United States. The only accurate figures obtainable are those from State Hospital admissions and police records. These are merely fragmentary of the whole. Dr. Lawrence Kolb, of the United States Public Health Service, in an article in the March issue of the Quarterly Journal of Studies on Alcohol, states that it would appear safe to assume that there are at least 200,000 persons in this country whom alcohol has so completely mastered, that is, who are chronic alcoholics, or persons who cannot, or will not, control their drinking and who, as a result, have become serious problems to themselves, to their families, and to the community. He also states that there

* Read before the Sixty-sixth Annual Session, Little Rock, April 16, 1941.

are at any one time in this country 1,000,000 or more persons who, because of excessive indulgence and special susceptibility, are in danger of becoming alcoholics. He further states that this does not take into consideration another great group of individuals who are constantly exposing themselves to accidents, disease, and social hazards due to over-indulgence in alcohol. Other authors quote higher figures. Drinking is more prevalent among the male population. The ratio is approximately 7 males to 1 female.

Mental hospital admission rates for alcoholics over the United States reveal some interesting figures. The rate, according to the last census figures, is 8.1 per 100,000 for ages 25 to 64. The highest rate is 11.8 per 100,000 for the New England States, and the lowest is 3.8 per 100,000 for both the West North Central and the West South Central, of which Arkansas is a part. These figures refer, of course, to the more extreme cases. For our own State Hospital over a five-year period, 1936 to 1940, inclusive, the following figures are of interest:

ADMISSION TO ARKANSAS STATE HOSPITAL				
Five-Year Period, 1936-1940				
Year	Total First Admissions	Total Re-admissions	Total First Admission Alcoholics	Total Re-admission Alcoholics
1936	1,378	281	85	20
1937	1,477	344	66	19
1938	1,514	319	73	29
1939	1,373	336	77	34
1940	1,288	331	54	37
Yearly Average	1,406	322½	71	27½

The average yearly total first admissions over this 5-year period is 1,406. The average yearly alcoholic first admissions is 71. Using the figure 2,000,000 as our present population, our average yearly first admission rate of alcoholics to the State Hospital is 3.55 per 100,000 of population. This is almost identical with the figure arrived at by the Census Bureau for the West South Central area. The percentage of first admission cases is 5 per cent.

Over the entire United States in 1938, more than 4,900 persons suffering from alcoholic psychoses were admitted to mental hospitals. Approximately 7,600 were admitted for alcoholism without psychoses. These figures apply only to the extreme cases and represent the hospitalization part of the problem. No available figures are obtainable as to the problem in the municipal hospitals.

The effects on the Individual: The effect of chronic alcoholism on the individual is two-fold, viz: physical and mental. Time does not permit

a detailed discussion of all the effects produced by alcohol on the individual. The principal effects physically are on the cardio-vascular, nervous system, and the liver. Recent experiments seem to indicate that alcohol in moderate amounts does not impair renal function, the arterio-sclerotic kidney being an exception to the rule. Some authors, however, still insist that alcohol may cause or promote a chronic nephritis.

There is no doubt that drinking lowers the resistance of the body to disease by causing the drinker to neglect his health while under the influence of liquor.

Chronic intoxication from alcohol produces a fatty infiltration and degeneration of the heart muscle. Excessive fatty degeneration of the myocardium is especially common in young female alcoholics according to Cecil. Investigators are still uncertain as to how much damage is done to the peripheral vessels.

It has been pretty well established that the nervous system suffers not from the direct result of alcoholic poisoning but from an avitaminosis as result of an inadequate balanced diet. Chronic drinkers simply drink too much and do not eat enough and this is the cause of the vitamin deficiency. As a result of this deficiency, a number of nutritional diseases occur, viz: pellagra, polyneuritis, liver disturbances, and even mental disease. The pathology found in the different forms of neuritis is essentially that of a degeneration rather than an inflammatory process of the nerve elements.

The effect on the liver is one of fatty infiltration rather than by direct causation as has been held heretofore. It is thought that cirrhosis develops as result of this deposit of fat in the liver. The exact pathological process in the ultimate formation of cirrhosis of the organ has not yet been determined.

The effect of the long continued use of alcohol on the mental status of the individual ranges all the way from that of personality changes and mental deterioration to the frank psychoses, such as alcoholic paranoia.

Incidence of Venereal disease in alcoholics: The individual alcoholic is an important factor in the spread of syphilis and other venereal diseases. During his spree, he loses all sense of judgment and precaution. He not only becomes infected but spreads his disease. Forel's statistics showed that 76 per cent of men and 66 per cent of women were infected while drunk. Lombolt's figures are 48 per cent and 75 per cent. There is not a physician present who has

not had ample experience in treating such individuals who contracted the disease during a drunken spree and also their marital partner who was innocently infected.

Mortality rate from alcoholism: Due to the reluctance of many physicians to certify alcoholism as a cause of death out of respect to the families of the deceased, what statistics that are obtainable are inaccurate and only indicate the trend of the mortality rate due to this cause. Throughout the United States in 1938, acute and chronic alcoholism was certified as the primary cause in 2,569 deaths. There were 959 deaths certified as due to alcoholic cirrhosis of the liver. The Census Bureau figures reveal the fact that death from alcoholism exceeds the death rate from a score or more infectious diseases. In Boston, in 1939, the death rate from this cause was 16.4 per 100,000, while in New York it was 4.5. Probably the reason for this is due to more liberal laws in Massachusetts. The alcoholic can purchase it openly and without restriction. In New York, a physician's prescription is required. This high mortality rate exists in most of the New England and Middle Atlantic States. It is impossible to secure accurate figures as to the number of deaths due to suicide, homicides, accidental deaths, and all other deaths in which alcohol was a contributing factor.

Crime and Alcoholism: According to figures by the Federal Bureau of Investigation for the year 1939, covering a total of 1,214 cities with a total population of slightly over 39 million, there were 592,500 arrests for drunkenness, about 41,500 for driving a motor vehicle while drunk, and about 159,500 on a charge of disturbing the peace. No figures are available as to the number of suicides and homicides due directly to alcohol. Crimes due directly or indirectly to alcohol are usually those of violence against the person. Crimes against property are not so common.

Studies in Massachusetts as to the extent of crime in which alcohol was a factor indicate that 50 per cent of persons sentenced to penal institutions committed offenses associated with alcoholism. In 1893, The Committee of Fifty, studying 13,402 convictions in 17 prisons and reformatories in 12 states, came to the conclusion that alcoholism is a factor in 50 per cent of the cases and the sole cause in 16.87 per cent.

Alcoholism and Accidents: The literature is abundant with reference to accidents due to drunken drivers. In 1939, 32,000 people were killed in the United States. 12,000 of these were pedestrians. 68 per cent of these were

killed in the cities. 1,150,000 persons were injured and 90,000 of these were permanently crippled. Alcoholism was a major factor in these accidents. According to Heise, alcohol figures high in the hit-and-run driver. The peak age of the drunken driver is from 25 to 30. Statistics indicate that the prevalence of drunken driving is in the early evening and over the week-end. The high incidence of highway accidents due to drunken driving is too well known to the public for further statistical discussion. However, the Arkansas State Police records in our own state are interesting.

Analysis of Motor Traffic Deaths Occurring in Arkansas for Years 1936, 1937, 1938, 1939, 1940, and January, 1941:

PRIMARY CAUSE OF ACCIDENTS		
	1936	Deaths Per Cent
Driving while under influence of alcohol	97	22.9
No figures are available for drunken pedestrian accidents for year 1936		
	1937	
Driving while under influence of alcohol	92	23.89
Drunken pedestrians	14	3.962
	1938	
Driving while under influence of alcohol	65	20.186
Drunken pedestrians	9	2.795
	1939	
Driving while under influence of alcohol	61	17.236
Drunken pedestrians	14	3.962
	1940	
Driving while under influence of alcohol	62	17.56
Drunken pedestrians	10	2.83
	January, 1941	
Driving while under influence of alcohol	5	16.13
Drunken pedestrians	1	3.23

The magnitude of the problem of alcoholism merits a well organized program directed along scientific lines in the care, treatment, and rehabilitation of the unfortunate victims of this condition. Our State Health departments have done a splendid work in the prevention and control of such diseases as tuberculosis, typhoid fever, small pox, syphilis, and other infectious and contagious diseases. Alcoholism is just as important a public health problem as any of these, and yet nothing is being done about it. It is the only public health problem at this time which is receiving but little attention. The time is ripe for a well organized and intelligent attack on this problem. The Medical profession should lead the movement.

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March 19, 1943.

TO THE PHYSICIANS OF ARKANSAS:

House Bill No. 60, recently passed by the legislature, has been signed by Governor Adkins and is now in force, as it carries the emergency clause. This law changes the method of admissions of patients to the State Hospital. It provides for:

First: Voluntary admissions. Any person who may become mentally ill and in need of hospitalization may make application himself or by his nearest relative or guardian, to the Superintendent at the central office in Little Rock, for admission as a patient to the State Hospital. Also, a minor may be admitted under this section on the request of a parent or guardian.

Second: An individual may be admitted as a patient on the request and certificate of a health officer or a physician. Any person suffering from an acute psychosis, including acute or chronic alcoholism or drug addiction who requires immediate hospitalization, may be admitted under this section of the Act.

Third: Any person not a patient in the State Hospital may be admitted to the State Hospital upon a writ of commitment from the probate court of the county in which the person lives. The procedure provided for in the Act is as follows: "If any health officer, or any regularly licensed and practicing physician believes any person residing in the county, who is not a patient in the State Hospital, is so suffering from mental disease as to be dangerous to himself or to society and such person cannot be taken peaceably to the State Hospital as provided in other sections of this Act, then such health officer or physician shall certify this fact to the Judge of the Probate Court of such county for a hearing. Copies of such certification to be delivered to the person affected hereby, or to his guardian or to his nearest relative, if any, whereupon said Court shall hold a hearing either in regular term or in vacation in chambers receiving such evidence as may be offered by all parties interested, after

which he shall, if the evidence justifies, issue an order of commitment to the State Hospital."

This is briefly that part of the Bill which affects the physicians of the state in their relationship to their mental patients. This is one of the most progressive steps Arkansas has ever taken relative to the care and treatment of its unfortunate mentally ill, and it will not be long until our doctors and the public in general will begin to realize the full benefit of this law.

We will have mimeographed copies of this law at the State Medical meeting in Little Rock in April. They will be placed at the registration booth and it is hoped that each doctor attending the annual meeting will take one and become thoroughly familiar with its provisions. Also, we shall be glad to mail to any doctor in Arkansas a mimeographed copy upon receipt of request for same. We hope you will write us for a copy.

Sincerely yours,

A. C. Kolb, M. D.
Superintendent.

POSTOPERATIVE VITAMIN DEFICIENCIES

Prolonged chronic illness followed by sharp limitation of diet during a period of preoperative preparation, especially when surgery of the gastrointestinal tract is contemplated, may result in a state of partial vitamin depletion. Most parenteral fluids routinely contain glucose, which sets up an additional drain on the vitamin B stores in the body. Postoperatively, nausea and vomiting occur frequently and there is often the necessity for complete restriction of food for days at a time.

This sequence of events was clearly reproduced in a case recently reported (*Ann. Int. Med.*, 18:110, 1943). The patient developed a sore tongue and became uncooperative, disoriented, and confused. A dramatic change ensued after administration of riboflavin and nicotinic acid, with complete disappearance of the lesions within five days.

A number of laboratory procedures have been developed in recent years to augment the clinical diagnostic approach to vitamin deficiency disease, but many of them require special equipment and are not easily adaptable for routine clinical use. Physicians may obtain a list of vitamin values of foods and a bibliography of important and generally informative papers on vitamins by writing Eli Lilly and Company, Indianapolis.

COMMITTEE REPORTS

TO ANNUAL SESSION

APRIL 19-20, 1943

COMMITTEE ON SCIENTIFIC WORK

The Committee on Scientific Work has experienced considerable difficulty in presenting the 1943 program. It is, however, confident, that the scientific papers to be presented will prove highly interesting and informative. The program appears in this issue.

H. King Wade, Chairman,
Hot Springs National Park
W. R. Brooksher, Fort Smith
*Euclid M. Smith,
Hot Springs National Park
*Joe H. Sanderlin, Little Rock

REPORT OF THE COMMITTEE ON HEALTH AND PUBLIC INSTRUCTION

The Committee on Health and Public Instruction desires to make its report on health conditions in Arkansas during the past year.

There was no unusual incidence of any particular disease, with the exception of poliomyelitis. In 1942, 151 cases were reported as against 59 cases in 1941. Syphilis reports increased, due rather to better case finding than to any increase of the disease in the State. Reports indicated a decrease in whooping cough, septic sore throat, scarlet fever, diphtheria, and measles as compared with 1941. Pulmonary tuberculosis remained about the same. There was an increase in the number of cases of tularemia, 104 cases being reported in 1942 as against 97 in 1941. Typhoid, pneumonia, malaria, and undulant fever showed some decrease in 1942 as compared with the previous year.

The responsibilities of the State Health Department increased during the past year to an unprecedented level, due largely to the demands of the Army and war industries for the control of communicable diseases in and around defense areas. The Department has been handicapped because of the loss of trained personnel. Professional and technical help cannot be replaced and many areas of the State which were previously given public health service are now entirely without. Concentration is made on the control of communicable diseases, paying particular attention to milk control work, and the handling and preparation of food.

A great amount of planning and organization has taken place in regard to emergency medical service for civilian defense, and it is felt that Arkansas is well organized for any emergency that might arise because of enemy attack or sabotage.

Because of the loss of so many physicians and other health workers to the armed forces, we urge the remaining professional people of the State to always be on the alert for communicable diseases and report them to the State Health Department immediately—if necessary, by telephone.

Conditions brought about by the war try everyone's sense of responsibility, and only through cooperative action will we be able to deal with any outbreak of epidemics.

W. B. Grayson, Chairman, Little Rock
Byron L. Robinson, Little Rock
J. Harry Hayes, Little Rock
M. C. Crandall, Wilmot
R. M. Eubanks, Little Rock
Hoyt R. Allen, Little Rock

REPORT OF COMMITTEE ON MEDICAL EDUCATION AND HOSPITALS

ANALYSIS OF PRIVATE HOSPITALS

(42 Hospitals Reporting)

Questionnaires were sent to 81 hospitals over the state, and in four days response was obtained from 42, representing a total bed capacity of 1,663.

The hospitals reported an average bed capacity of 1,227. This shows that the hospitals have been 74% filled during the past year. However, in most of the centers where there is military activity such as Little Rock, Pine Bluff, Fort Smith, and Texarkana, the hospitals have been filled to capacity.

The 42 hospitals report on an increase of 50,214 hospital days over that of 1941. Our reports for 1941 showed an increase of 34,446 so that during the past two years, the increase in hospital days has been 84,650.

Seventy-five per cent of the hospitals reporting showed an increase in financial returns during the past year. Eighty-two per cent of the hospitals report that their institutions are on a satisfactory financial basis. Only 17 out of 42 hospitals reporting have been inspected by the American College of Surgeons. About seventy-eight per cent of the hospitals have an X-Ray and clinical laboratory. Only fifty-five per cent of the hospitals have regular arrangements for tissue examination.

Forty-seven per cent of these hospitals report that Act 115 has worked to the advantage of their hospital. Twenty-six per cent of the hospitals reporting claim that their relations with Act 115 were unsatisfactory. Principal complaint of those reporting unfavorably is that the amount allowed (\$3.00) per day is not sufficient to cover cost at the present time.

Sixty-four per cent of the hospitals report that the personnel problem is a serious one and that they are unable to give the kind of service they would like to due to the shortage of technicians, nurses, etc.

Almost hundred per cent of the hospitals reported that they have a regular system of record keeping.

Seventy-one per cent of the hospitals reporting have been able to handle all patients applying for service. Thirty-six per cent report that they have waiting lists and are unable to take care of all patients applying for hospitalization.

The question was asked of the hospitals, "What do you think of postwar prospect for hospitals?" This question was answered in numerous ways. The majority said that they did not know what to expect. Some reported the outlook as doubtful. Others reported it as stormy. Very few have an optimistic view of the situation.

GROUP HOSPITALIZATION PLAN

Mr. J. M. Gunn has kindly submitted the following report:

Since our report to your Committee a year ago, many conditions and circumstances have arisen which have affected the Plan. Among these unusual circumstances might be mentioned:

1. The large number of men between the ages of eighteen and forty-five who have gone into the service, thus eliminating them as paying members of the Plan or as prospective members.
2. The larger than usual shifting from job to job occasioned by increased earning opportunities and the extraordinary demands for workers. This has made it difficult to service members moving from job to job

- and has retarded somewhat the enrollment of employees.
3. With keen competition for the services of men and women capable of becoming organizers, it has been more difficult, of course, to obtain satisfactory organizers. We have been fortunate on the other hand to hold together for the most part our force of splendid organizers.
 4. More and more it becomes necessary to depend upon women as prospective new members and of course the number of employed women has increased greatly. It should be recalled, though, that women on the whole are much more costly to the Plan because they are hospitalized more often and for longer periods than are men. The preponderance of women covered by the Plan necessarily, therefore, tips the balance unfavorably, and constantly narrows the margin between total income and total expenditures for hospitalization.

In spite of these conditions which might be viewed after a fashion as handicaps, there are circumstances that are favorable for the progress of the Plan and we are happy to report an all-over growth of the Plan which we believe quite satisfactory in the light of conditions. The total income of the Plan increases from month to month. This is an excellent criterion by which to judge its sound progress.

It should be noted here that the success of the Plan is attributable to, and continues to hinge upon, the conscientious cooperation of the members of the Medical Society in both the underwriting of risks on new members and in the hospitalization of members of the Plan.

In the two localities of Pulaski County and Jefferson County a most satisfactory progress has been made. The Plan has been able to hold its own, we believe, in the other counties. A picture of the Plan's activities may be had from the following facts:

1. Since the inauguration of the Plan 3,398 members and dependents have been hospitalized, with:
 - A. An average stay of 7.20 days per patient.
 - B. Of those hospitalized 2,271 (66.8% of the total) were female members and dependents, the total cost being \$79,686.89 (70.6% of the total cost).
 - C. Of those hospitalized 1,127 (33.2% of the total) were male members and dependents, the total cost being \$33,149.79 (29.4% of the total cost).
2. Total savings to members aggregate \$112,836.67 in bills paid by the Plan, and total hospital days have amounted to 24,481.

Interesting from the standpoint of the ratio of medical, surgical, maternity and accident cases hospitalized, are the following figures:

Total hospital bills paid on medical cases	\$ 32,695.64
(28.98% of the total)	
Total hospital bills paid on surgical cases	62,502.88
(55.39% of the total)	
Total hospital bills paid on maternity cases	12,616.45
(11.18% of the total)	
Total hospital bills paid on accidents	5,021.70
(4.45% of the total)	
TOTAL	\$112,836.67

Maternity benefits play a more and more important role in hospitalization costs. For instance, in the calendar year 1941 maternity benefits amounted to only 4.2% of the total hospital claims, while in the calendar year of 1942, maternity benefits were 18.7% of all claims paid.

The average cost per person hospitalized in Pulaski County since the beginning of the Plan has been \$28.99 for males and \$35.60 for females.

It will be recalled that at the time of our report a year ago mention was made of a considerable deficit that had been incurred by the underwriters in the organization of the Plan. We are happy to report that by virtue of the splendid cooperation of the doctors and member hospitals, and through the best administrative practices of which we have been capable, the deficit has been materially reduced. Within a matter of months now, the entire deficit should be made up and the Plan then should be in position to:

1. Begin creating a reserve for epidemics and unforeseen contingencies.
2. Offer still further liberalization of benefits to members.

So far as our recollection serves us, there has not been a single complaint concerning the organization and administration of the Plan made by either members of the Medical Society or member hospitals. It has been and will continue to be our guiding aim to so conduct the Plan and its operations that there shall be no grounds for disappointment or criticism.

EDUCATION

During the past year practically no work has been done of a postgraduate nature in the state. It is not necessary to state the reason for this. We wish, however, to submit the report submitted by the Dean of Medical School, Dr. Byron L. Robinson. "Concerning the War Training Program, we have no definite information from Washington as yet that might be considered official. We do know that we will be considered for it. In the light of the fact that we have secured permission from the Council of the American Medical Association to go on the accelerated program and the fact that the State Legislature has given us an increased appropriation, I do not believe there is any doubt but that we shall go on the program, possibly about July 1st."

ENROLLMENT

	1941-1942	1942-1943
Freshman Class	82	82
Sophomore Class	74	71
Junior Class	70	61
Senior Class	66	70
Total	292	284

GRADUATES

	June 9, 1942	June 8, 1943
Number holding commissions:		
Army	45	40
Navy	16	16
Public Health	2	2
Others	3	12
Total	66	70
All accepted intern appointments.		

APPLICATIONS FOR FRESHMAN CLASS

	1941-1942	1942-1943	1943 (July 1)
Applications considered	222	405	129 (March 10)
Applications accepted	82	82	44 (March 10)

UNIVERSITY HOSPITAL

House Staff (July, 1941-July, 1942)	17
Interns	8
Assistant residents and residents	9
Average hospital bed occupancy for year 1942.....	164 or 78.1%

ISAAC FOLSOM CLINIC

New patients for year 1942	6,586
Patient visits for year 1942	56,824

STUDENT BODY

Number holding commissions:		
Army	183	64.4%
Navy	63	22.2%
Public Health	2	.7%
Others	36	12.7%
	<hr/> 284	

FACULTY

	Full Time	Part Time
Called to armed services:		
Army	4 2.9%	35 25.5%
Navy	0	7 5.1%

**UNIVERSITY OF ARKANSAS SCHOOL OF MEDICINE
APPLICATIONS FOR ADMISSION TO THE
FRESHMAN CLASS**

	1939-1940	1940-1941	1941-1942	1942-1943	(March 10 1943 for July 1)
Resident applications	77	91	81	137	93
Residents accepted	66	72	72	81	44
Non-resident applications	108	120	141	268	42
Non-residents accepted	16	10	10	1	0

Respectfully submitted,

M. J. Kilbury, Little Rock
†J. W. Amis, Fort Smith
O. W. Clark, Pine Bluff
Earle H. Hunt, Clarksville

**REPORT OF COMMITTEE ON PUBLIC
RELATIONS**

Your Committee on Public Relations submits the following report:

The only contact the Arkansas Medical Society maintains with the public, at this time, is through the articles, ably and laboriously prepared by our Secretary, and published by a majority of the newspapers throughout the State. Your Committee recommends that this contact be continued.

Your Committee thinks the time has come when some effort should be put forth by the Arkansas Medical Society to measurably counteract the pernicious radio and newspaper sales pressure so conducive to self-nostrom medication, and at the same time to put the seal of the Arkansas Medical Society on such procedures as may safeguard the health of our people.

Your Committee recommends that this be done in as dignified a manner as is compatible with deliverance of any public utterance. We, therefore, recommend the following method be used to get our messages to the public:

That the several county medical societies comprising the Arkansas Medical Society be authorized and requested to undertake, at their individual expense, the erection of roadside signboards at or near the entrance of highways to cities or towns;

That said signboards be of uniform size (possibly 3x4 or 4x5 feet) and carrying a terse, pertinent message.

No expense is to accrue to the Arkansas Medical Society, though jurisdiction over all messages displayed is to remain in the parent organization.

No wording other than the approved message is to appear on the board, except the signature—"Arkansas Medical Society," which will be at the bottom of each and all messages.

The approved messages may be changed or rotated at the will of the individual county society, monthly, quarterly, semi-annually, or otherwise.

It is suggested that messages may be printed on plywood or wallboard and attached to the permanent outdoor sign in order to facilitate changes.

Messages should be terse in order to be easily read.

Your Committee herewith submits a few approved messages. Others may be submitted by the several county societies for approval by the Public Relations Committee representing the Arkansas Medical Society.

Your Committee further suggests that these messages may also be used by the several county societies as display cards in the various newspapers of the state.

The following messages are suggested as being terse and appropriate:

THERE IS NO DISGRACE IN HAVING CANCER. THE DISGRACE IS IN THE CRIMINAL NEGLECT OF PROMPT DIAGNOSIS AND TREATMENT WHILE IT IS CURABLE.

ARKANSAS MEDICAL SOCIETY

WHY GAMBLE WITH YOUR CHILD'S LIFE? VACCINES ARE HARMLESS AND WILL PREVENT SMALL-POX, SCARLET FEVER, DIPHTHERIA, WHOOPING COUGH, TYPHOID AND OTHER DISEASES.

ARKANSAS MEDICAL SOCIETY

TUBERCULOSIS IS STILL RAMPANT. PARENTS OFTEN DELAY PROPER EXAMINATION OF CHILD WITH COUGH TILL DISEASE IS FAR ADVANCED.

ARKANSAS MEDICAL SOCIETY

MOST CHILDREN'S DISEASES START WITH A SNIFFLING COLD. DON'T SEND YOUR CHILD BACK TO SCHOOL TILL SURE HE WILL NOT SPREAD DISEASE.

ARKANSAS MEDICAL SOCIETY

DOCTORS ORGANIZE IN ORDER TO PROTECT THE PUBLIC FROM UNEDUCATED AND UNSCRUPULOUS MEN WHO VALUE YOUR DOLLAR ABOVE YOUR HEALTH OR LIFE.

ARKANSAS MEDICAL SOCIETY

WHY PAY A DOLLAR FOR A NICKEL'S WORTH OF MEDICINE BECAUSE IT HAS BEEN PATENTED? BY GUESSING IT WILL CURE, YOU MAY LOSE VALUABLE TIME.

ARKANSAS MEDICAL SOCIETY

YOU BET YOUR CHILD'S LIFE AGAINST A COUPLE DOLLARS WHEN YOU GIVE LAXATIVES BEFORE YOU KNOW CAUSE OF STOMACH ACHE.

ARKANSAS MEDICAL SOCIETY

CLOSE YOUR ANNUAL HEALTH BOOK WITH A COMPLETE AUDIT OF HEART, BLOOD VESSELS AND KIDNEYS. PREVENTION IS BETTER THAN CURE.

ARKANSAS MEDICAL SOCIETY

BE SURE CHILDBIRTH DAMAGES ARE PROMPTLY AND EFFICIENTLY REPAIRED AND THEREBY PREVENT A SECONDARY GROWTH—CANCER.

ARKANSAS MEDICAL SOCIETY

RESOLVE TO START YOUR HEALTH YEAR RIGHT. DO NOT TAKE IRRESPONSIBLE ADVICE OR BE INFLUENCED BY HIGH PRESSURE RADIO SALES TALK.

ARKANSAS MEDICAL SOCIETY

AFTER EFFECT MAY BE WORSE THAN DISEASE. IF CONVALESCENCE DELAYED AFTER CHICKENPOX, MEASLES OR A COLD, FIND OUT WHY.

ARKANSAS MEDICAL SOCIETY

H. A. Rands, Dumas
†J. M. Kolb, Clarksville
W. T. Wootton, Chairman,
Hot Springs National Park,
Committee

REPORT OF COMMITTEE ON MEDICAL ECONOMICS

Your committee has made a study of the question of providing medical service to all groups. It is agreed that any program to be successful to meet the requirements should insure medical care, surgery and hospitalization to all groups.

To carry out such a plan it would be necessary to secure some source of finance. The principal sources studied were taxation, insurance company and mutual group organizations. To finance such a service by taxation would require state and federal participation. The voluntary mutual insurance plan would require extensive organization and, in most instances, would result in an imposition on the plan by certain groups whose every increasing demands could not be met. The business method of insurance which would create a profit sharing business has the advantage of having an efficient business organization behind it.

Investigation reveals that in the United States, where the physician has the privilege of selecting his own location and the family has the privilege of selecting their own physician, the best medical service to the greatest number is rendered by the medical profession. This is an indorsement of our present system.

The tendency of the political influence today is toward compulsory insurance and regimented medicine. It is the opinion of your committee that we should not recommend any proposition that would give any advantage to those who favor state medicine. If such a plan were financed by taxation it would be government controlled. It is a known fact that he who holds the purse strings holds the governing hand. Laws concerning compulsory medicine in our opinion would be made on unreliable information. This is borne out by several medical reports made to congress by certain public officials who favor compulsory plans. All physicians who have followed some of these reports know that they were made without sufficient facts and on distorted facts.

Your Economics Committee wishes to recommend that the Arkansas Medical Society indorse and encourage independent insurance companies in providing medical service protection for those who desire it. This position continues to endorse independent business. We also wish to recommend that the Arkansas Medical Society go on record against any plan for insurance or group

medicine that would in any way jeopardize independent medicine.

H. E. Mobley, Chairman, Morrilton
†J. H. Wilson, Wynne
R. M. Blakely, Little Rock

REPORT OF COMMITTEE ON CANCER CONTROL

The activities of the committee have been greatly hampered due to the war and gas rationing. Considering the difficulty with which we are faced we feel that while no great amount of constructive work was done, that which was done was of a constructive nature and has been very encouraging to the committee.

The first meeting was held in Little Rock at which time Mrs. W. R. Brooksher met with us and a conference was held on the problems of the Women's Field Army. Necessary expenditures of the Women's Field Army were approved and we commended the constructive work which is being done under Mrs. Brooksher.

The first training school for officers and co-workers of the Arkansas division of the Women's Field Army was held in February. The school has forty-six attending. Different phases of the cancer problem were discussed by Dr. Shields Abernathy of Memphis and by your chairman.

Following the morning session of the school a cancer clinic was held at the St. Bernard's Hospital by the physicians of Jonesboro, assisted by Drs. Abernathy and Hames. One hundred and twelve patients presented themselves for examination. Approximately forty per cent of those attending the clinic were found to have had cancer in some form.

Your committee is of the opinion that these schools should be continued and that when things are normal again, cancer clinics should be held in those areas desiring them where local cooperation can be obtained.

The work of the Women's Field Army has been greatly hampered due to the war. Your committee, however, felt that the work should not be dropped and that we carry on as best we could. Your chairman is particularly appreciative of the cooperation of the other members of the cancer committee. They have responded most admirably considering the handicaps over which we had no control.

Respectfully submitted,

Fred Hames, Chairman, Pine Bluff
†Fred H. Krock, Fort Smith
†Vincent O. Lesh, Fayetteville
Glenn Johnson, Little Rock
D. E. White, El Dorado

REPORT OF MATERNAL AND CHILD WELFARE COMMITTEE

President Robins handed this Committee the problem of Obstetric and Pediatric care of the wives and children of non-commissioned men in our armed forces, to be financed by the Maternal and Child Health Bureau in Washington.

We met in Prescott last summer with Dr. Grayson, State Health Director, along with several past presidents and hospital owners.

Plans were made for this work and presented to the Council. This body gave its approval and the entire set-

up was published in the Journal after having been accepted in Washington.

Numerous unpleasant incidents from different groups or sections started at once. None of these could be adjusted since Washington refused to alter the approved plan. A trip to St. Louis by the State Secretary, Chairman of the Council and State Health Director for a conference with a representative from the Maternal and Child Health Bureau failed to get further concessions. Fortunately the funds were rapidly exhausted and the controversies stopped. Somehow Dr. Grayson was able to get \$22,000, which was \$12,000 more than anticipated. The issues involved in this matter have not been settled.

There has been no refresher work done the past year. No one accepted the offer of expenses to take graduate work in Obstetrics or Pediatrics. Several new Prenatal and Pediatric Clinics have been established by the State Health Department. The Health Department has continued the investigation of Maternal deaths without material change in reasons for such. This work should be discontinued for the present due to shortage of office help.

We have only one recommendation, but it is considered highly important: More Prenatal and Pediatric Clinics should be set up in those areas where there is a shortage of physicians and in sections where midwives will be attending more and more mothers and babies.

S. A. Thompson, Chairman, Camden
Don Smith, Hope

R. D. Dickins, Monticello

†B. P. Briggs, Little Rock

†C. G. Leverett, Eudora

Robert Hood, Russellville

J. K. Walker, Pine Bluff

†Clyde D. Rodgers, Little Rock

E. C. McMullen, Pine Bluff

G. L. Kimball, DeQueen

R. C. Kennerly, Camden

C. R. Henry, Little Rock

REPORT OF COMMITTEE ON SYPHILIS

HEALTH DISTRICT NUMBER ONE
203 24th Street, Ogden, Utah

February 18, 1943

Dr. W. R. Brooksher, Secretary

Arkansas Medical Society

Fort Smith, Arkansas

Dear Bill:

I have your letter of February 3 concerning the report of the committee for the control of syphilis. This letter finally reached me here in Utah.

Last September I was ordered by the U. S. Public Health Service to report to Denver, Colorado. We packed our furniture hurriedly, loaded it on a moving van and started for Denver on September 10, reporting to District 8, headquarters in Denver. I remained there about ten days getting orientated in the procedures of the U. S. Public Health Service. From there I was sent to the Utah State Health Department in Salt Lake City and worked from out of that office in the central part of Utah for about one month. Upon the resignation of the director of District No. 1, which comprises seven counties in the northern part of the State, I have been acting as director of District No. 1 with headquarters in Ogden. The U. S. Public Health Service has loaned two health officers to Utah because of the fact that there is considerable construction of ordnance supply

depots in this area. There are also a number of air bases and army camps. We even have a navy supply depot on the banks of the great Salt Lake which is now near completion.

I have been rather busy taking blood Wassermanns and giving typhoid shots and smallpox vaccinations to civilian workers. Found about 415 cases of syphilis at the Naval Supply Depot which I have been endeavoring to keep under treatment. Also the fact that I am supposed to be responsible for the health of one-fourth of the population of the State of Utah keeps me rather busy.

I regret very much that I will not be able to attend the meeting of the Arkansas Medical Society this coming spring. For several months past I have been reviewing the laws of various states that have been passed to help in the control of syphilis and have come to the conclusion that one of the best things that our committee could do would be to sponsor laws requiring premarital blood Wassermanns and Wassermanns on all antepartum cases. Utah has passed such laws and they are working out very nicely at the present time. I am mailing a copy of these laws to Dr. R. B. Robins and have requested that he forward these on to the other members of the committee. I sincerely believe that this would do much to find and eradicate syphilis in our population there in Arkansas. In fact I feel so strongly concerning this matter that it seems to me that it would be well to have a national law controlling this so that no couple could go across the State line and secure a marriage certificate without having a recent Wassermann. Let's get busy and see that these laws are passed at an early date so that Arkansas will not be one of the "tail-end" states to pass a good measure as we have most always been in the past. These laws have been tried long enough to prove their value. Therefore, it behooves us to get busy and do something about it immediately.

My home address is 111 "I" Street, Salt Lake City, Utah. I am still receiving the Arkansas Medical Journal and read with much interest your "patter" and what the doctors there in the service are doing.

Very truly yours,

Wm. P. Scarlett, M. D.,

Surgeon (R),

U. S. Public Health Service,

Director of District No. 1,

Utah State Department of Health

REPORT OF THE COMMITTEE ON POSTGRADUATE STUDY

This will serve as a report from the Chairman of the Committee on Postgraduate Instruction of the Arkansas Medical Society.

At the beginning of the last year, it was very difficult to decide whether or not the activities of the Committee should continue as they had in the past. There were many factors in the outlook which did not indicate a successful postgraduate course could be held. Among these, the outstanding ones were tire and gasoline rationing and the scarcity of doctors all over the state. It seemed unlikely that the meetings would be well attended.

After due consideration, the Committee on Postgraduate Instruction decided to postpone further activities until the outlook had become more favorable.

Very truly yours,

D. A. Rhinehart, M. D., Chairman,

Committee on Postgraduate Instruction, Arkansas Medical Society

COMMITTEE ON INDUSTRIAL HEALTH

During the past year, your Committee has endeavored to continue the study of the needs of the physicians in the state for more information concerning the care of the industrial worker along the lines of industrial accidents and industrial health.

Industrial health, as well as industrial medicine and surgery, has become more important than ever before because of the increased production effort that industry is putting forth because of the war conditions. To prevent disease and heal the ill has always been the aim of the medical profession both in war and peace. The medical profession has never digressed from that ideal.

We are called upon now to apply our knowledge of public health and hygiene and care of the sick to new or expanded industries and their working personnel. The medical profession, as a whole, in regard to industrial health, is considerably late. There are a few men who saw the light and followed it but the vast majority of physicians in general practice have not appreciated the light shed upon industrial health. Now, it has fallen upon our shoulders. The majority of our great profession, in humility, are called upon to ask those leaders in industrial health to instruct their colleagues in important techniques which years of pioneering in industrial health and hygiene have developed.

Our goal can be very simply stated. We want a well worker on every job in this state and we want to safeguard him so that his working environment can not strike at his life or health. A simple statement but it embraces a large subject and implies a most appalling amount of work. It means that our professional worker in industry is really the entire field of public health and hygiene applied to the working place.

When a practicing industrial physician utters the words, "Industrial health," he is talking of the vast field that is to become paramount in the coming generation. He is not talking about accidents after they have occurred, nor the injured worker. He may have graduated from that many years ago. He is talking about a medical endeavor that includes the medical and surgical profession and all of its specialties.

Last December, your Committee met at the Albert Pike Hotel with Dr. Orlen J. Johnson, Council on Industrial Health of the American Medical Association, and discussed at length the various problems of industrial health and ways and means by which they might be solved.

Dr. Johnson made several suggestions that might be followed in this state.

1. That industrial health be included in a program of the State Medical Meeting.
2. That those county societies in our state that have industry should devote one or more meetings a year to industrial health. He suggested that the state society set up a speaker's bureau to provide programs for county societies, stating that this had been carried out successfully in some states.
3. That institutes or conventions be held in such cities as need this treatment; suggesting that this might be done in Fort Smith and Little Rock.

Our report last year, set up a definite program which was adopted by the reference committee. The State Board of Health agreed to make an effort to carry out the greater part of this program. What has been done, I am unable to say. But, I think Dr. Hearn of the State Board of Health has made considerable effort to carry out that program.

I have asked that county committees on industrial health

be appointed in some eight counties. In response to that suggestion, I received four replies. Your Committee feels that in each county where there is industry sufficient to justify that county committees should be appointed to work with the state committee.

Maintenance of health in industry is a collective responsibility. Worker and employer, plant physician and family doctor all have a part to play, and each one's manner of playing may affect the others. Now that our very existence as a free nation depends on the output of war industry, and that in turn upon continuity and efficiency at the job, we must each accept our part in our collective responsibility. There has never been a greater opportunity for the highest type of medical services.

E. E. Barlow, Chairman, Dermott

S. J. Allbright, Searcy

Fred W. Harris, Little Rock

†J. Donald Hayes, Little Rock

M. E. Foster, Fort Smith

S. A. Drennen, Stuttgart

COMMITTEE ON MENTAL HYGIENE

We, the Committee on Mental Hygiene, report the accomplishments of the past year and make recommendations for further steps in behalf of the mental hygiene program in our state.

ACCOMPLISHMENTS

First. We report with tremendous satisfaction the revision of our admission laws to the State Hospital. We can now legally take in voluntary admissions.

We can now admit patients upon the recommendation of any doctor in the state without commitment papers.

Henceforth, the only patients committed to the State Hospital will be those whose condition is such as to convince the State Hospital staff that a commitment is necessary: That is, for those who might hurt themselves or others if outside and who refuse to stay voluntarily. These commitments will be made upon the recommendation of the hospital staff to the chancery judge of the district from which the patient came. As can be seen, this places the mental patient on the same basis as other sick people: No court, no trial with all its embarrassment to the family and, we hope, no sheriff. By no sheriff, we hope that you doctors are going to bring the patients to the hospital. Taking the mental patient away from the courts will be a most important step in removing the stigma associated with mental disease and the State Hospital.

Second. We feel that the nice increase in appropriation for the State Hospital for the coming biennium is indicative of a better understanding of the problems and needs of our mental patients.

Third. Constitutional Amendment No. 33 stabilizes the State Hospital Board for the future. This provides for a staggered board, the membership of which can never be changed in its entirety during any one administration.

Fourth. Although our national emergency has delayed the establishment of the Psychiatric Unit at the Medical School, the opening wedge has been placed and a definite recognition of its need has been well established in the minds of the people and the medical profession.

RECOMMENDATIONS

First. We wish to emphasize the fact that although the State Hospital has had a tremendous boost in making

of it what it should be, it can never be of maximum service to our state until every doctor in the state is:

- (a) Mental disease conscious.
- (b) Is sold on early diagnosis and treatment of mental diseases.
- (c) Knows our State Hospital, what it can do, as well as what it cannot do.
- (d) Refuses to cooperate in dumping upon the State Hospital just destitute and physically ill patients.

Second. All the foregoing has to do with the treatment of mental diseases. We hope that with the instituting of a mental hygiene program in our State Health Department we can begin to get the benefit of preventive medicine in this field.

N. T. Hollis, M. D., Chairman
George B. Fletcher, M. D.
A. C. Kolb, M. D.
Elizabeth Fletcher, M. D.
Pat Murphey, M. D.

NOTE: Committee reports as published in this issue of The Journal will be presented to the House of Delegates by the respective committees but will not be printed in the final program distributed at the meeting. It is suggested that Delegates bring this copy of The Journal to the House of Delegates session.

† In Military Service.

COMMUNIQUE

February 17, 1943

To the Editor:

Have appreciated receiving my Journal regularly each month and especially enjoy the news items and Random Thoughts.

Hope you're keeping a proper check on the Treasurer and don't know how you ever get any money out of that Scotchman.

I noticed Fred Krock's communique last month and don't let him kid you. They couldn't run that hospital down at Corpus Christi without Krock, Shipp and Bounds. As for me, I am still helping to comb the west coast for more officers with the Procurement Office. I was very happy to be promoted recently to commander.

Yours for a better Journal. I think you are doing a swell job.

Sincerely,

R. J. Calcote,

Commander, M. C., U. S. N. R.,
Naval Officer Procurement, 703
Market St., San Francisco, Calif.

COMMUNIQUE

February 10, 1943

To the Editor:

I wish to inform you that I am receiving my Arkansas Journal and wish to express my sincere appreciation to you in seeing that it has reached me as stated.

As you know I am in the Navy, but attached to the Marines at the present time. They are a wonderful group of Regular Fellows and I have enjoyed my service with them very much. I have charge of the Medical Department of our outfit and have a responsible group of Corpsmen to assist me.

Keep the Home Front well in hand until the thing is all settled.

Best regards.

Thos. G. Price,

Lt. (jg), MC, USNR.

COMMUNIQUE

February 15, 1943

To the Editor:

Your note and my membership card have just arrived. Looks like the boys are scattered somewhat. The Journal has followed me over here twice, as recent a number as July, 1942, being on my desk.

This country is just about as different as anything there is to see. My quarters are comfortable and I have only to go to the yard gate to see camels laden with grain, wool, etc., passing by. Then bullocks and the carts with their red-turbaned drivers are always present. Many times I am reminded of the "Rebecca at the Well" story (you wouldn't know, ask Peggy) when I pass villages where the women come down with earthen jars on their heads to carry over to their houses.

Most of the native houses are of mud. Bricks are the chief article for building here and are made locally. I had a mould cut with F. R. on it so that each brick from that mould would be so stamped. We are building the hospital out of these bricks, not bad.

Two days from now I'm on a leave for a tiger hunt. If I get a tiger, I'll keep the hide for proof and I'll arrange the story of the kill on my way home. If not, I'll have a good trip anyway.

You'd get a laugh out of my speaking Hindustani but in about three months more I ought to be able to get by. I am taking private lessons. I also read Persian.

One piece of advice—This country is a woman-shopper's paradise—jewelry, embroidery, ivory, cloth, wool, furs, etc. So don't let Peggy and Elizabeth get out here and get started or we will both be broke.

Earl Bieri, from Hot Springs, is in the same camp but not in my command.

Regards,

Fount Richardson.

TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

FIRE is fire, no matter what the fuel, but when gasoline is thrown on a flame a dangerous explosion results. Tuberculosis is the same disease now as in peacetime, but war invariably favors a flare-up of tuberculosis and creates new difficulties for those who must combat the blaze. The hard-pressed general practitioner is a seasoned fire-fighter whose aid must be enlisted and whose effort must be supported if smoldering tuberculosis, lately coming under control, is to be prevented from spreading into a serious conflagration. Even veteran firemen, however, periodically examine their equipment and drill themselves to increase their efficiency.

WAR CHALLENGES THE GENERAL PRACTITIONER

Under the stress of war it has been observed that conditions favor the spread of pulmonary tuberculosis. Probably an increase in the disease has not occurred to date in this country as a whole, but a rise has occurred among other belligerent nations and in some of our own industrial centers.

Increase in prevalence and mortality can be traced to inadequate diet, insufficient institutional facilities and medical care, lowering of resistance from apprehension and disturbed rest, and overcrowding and poor housing in areas of concentrated war industry.

Since the disease appears on the increase in countries at war longer than ours, it must be assumed a similar trend is to be anticipated here. This calls for early diagnosis, hospitalization of active cases and discovery of infective contacts. Greatest hope for success lies in the interest and cooperation of the general practitioner. He sees the patient early and through his intelligent effort will come early diagnosis, prompt isolation and the investigation of contacts. Toward this goal we shall indicate a path for the practitioner, who, deprived of many a colleague, finds his problems multiplied and his strength and time in no wise reinforced.

Usually it is easy for a tuberculosis specialist to make a diagnosis once the suspect has been singled out by the practitioner. More difficult is it for the latter to give due consideration to tuberculosis—only one of many conditions that may assail his patient.

For example, cough is the most common symptom of the disease. In one with a history of previous acute pleurisy, chronic cough is very

suspicious. Nevertheless, the disease may be present without it, and most agree that cough or any other **symptom** is a relatively later, not an encouragingly earlier manifestation of pulmonary tuberculosis. If we persist in describing tuberculosis in terms of symptoms, we might as well omit further discussion of **early** diagnosis, even though we admit that knowledge of classical symptoms is essential if we are to have tuberculosis in mind when we encounter those less fortunate cases long past the stage when early discovery was possible. These symptoms include fatigue, particularly in the late afternoon, loss of weight, low-grade fever, chest pain and hemoptysis.

If tuberculosis is to be found preclinically or at onset of its earliest symptoms a thorough, practical and economical plan of attack is necessary. Weapons at hand include history, physical examination, tuberculin test, sputum examination, X-ray and fluoroscopy.

Tuberculosis specialists generally feel that the greatest deterrent to early diagnosis by the practitioner is the expense of X-ray examination. If it were as easy to X-ray the lungs as to do a physical examination many more early cases would be found. Where X-ray facilities are handy it is simpler to take a picture and study it than to do a physical examination, which, though thorough, may fail to disclose the trouble. Most practitioners lack office X-ray facilities, but the truth remains there is no substitute for a good X-ray picture. Today, in all but the most rural communities, arrangements can be made for X-ray of the chest in the indigent as well as in others.

Physical examination may uncover rales, breath sound changes, etc., but their absence does not mean absence of tuberculosis. In every sanatorium are patients with far advanced disease who have been told by their family doctors that no signs of tuberculosis were present. Similar oversight may occur in some early cases when symptoms are present as well as positive X-ray findings. This is no reflection upon the skill of the physician but proves that symptoms and X-ray evidence are often present before definite physical signs of tuberculosis develop.

Fluoroscopy, even in the hands of experts, is not as accurate as film methods in diagnosing tuberculosis. Serial pictures, too, give better clues as to the progress of lesions than mere observation of the clinical record.

The tuberculin test, variously conducted, is of value in the process of screening groups or studying individuals. A positive test shows that the skin has been sensitized by previous or present tuberculous infection. It does not prove that active pulmonary disease is present, but does call for an immediate chest X-ray. A negative test, conversely, is almost conclusive that active tuberculosis does not exist. There are exceptions to this statement, but they are rare.

Sputum examination is vital. A positive sputum leaves no doubt that active disease is present, but a negative sputum is no guarantee of its absence. There may be relatively few bacilli in a sputum sample; improper collection may provide saliva instead of thick material truly expelled from the lung by a spell of coughing; or too few samples may be examined. Reinforcing the simple smear are concentration methods, culture or guinea pig inoculations, and examination of the fasting gastric sediment in those swallowing their sputum.

Tuberculosis cases should be reported promptly to the public health authorities who assist in determining their disposition.

Many practitioners are not interested in treating tuberculous patients. Others feel they see cases so rarely that they would welcome assistance by experts. Sanatorium care, if available, promises conditions ideal for treatment and training of the patient and protection of his family and friends.

People who contract pulmonary tuberculosis usually do so because of intimate exposure to someone with a positive sputum. Thorough search is made in the patient's household and among his other associates, each being tuberculin tested and the positive reactors X-rayed. Obviously the X-ray, if showing nothing at first,

should be repeated at four-month intervals for several years, as breakdown may be slow to appear.

Many counties have well organized tuberculosis associations whose nurses serve as field workers. Granted this aid, the social side of the problem can be handled with personal home interviews, transportation of the patient to the sanatorium or clinic and of the contacts for testing and X-ray. Tuberculosis workers are well trained and function to give the practitioner able service and advice about the disposition of the case, the adjustment of the family and in follow-up of the patient once he leaves the sanatorium.

The family doctor should cooperate with those who have directed the treatment when he receives back the discharged case. Rehabilitation in these people is complex and important. Many sanatoria have personnel specially trained to instruct patients in occupations they will be fitted to carry on after their cure, or to prepare them for the special problems facing them upon their return to society. The family doctor must continue his interest through both treatment and rehabilitation periods, with periodic check-up, assurance and advice.

The greatest contribution the general practitioner can make in the field of tuberculosis in wartime is the intensification of his peacetime effort, keeping the disease constantly in mind and remembering that the ultimate ideal in controlling tuberculosis would be to have every adult X-rayed annually.

General Practitioner's Role, Paul Geary, M.D., Bulletin of the National Tuberculosis Association, March, 1943.

SPECIAL WARNING BULLETIN

SUBJECT: Epidemic Kerato-conjunctivitis

Incubation period. Five to ten days.

Clinical Manifestations. The onset may be preceded by a low fever and mild generalized malaise. The local ocular symptoms are merely those of a foreign body or conjunctival irritation. One eye is usually affected first, and in a large percentage of cases the second eye becomes infected within five to eight days. Preauricular and submaxillary glandular involvement with tenderness is common in a high percentage of cases.

Edema of the lids and the conjunctiva, especially the transitional fold, is very frequent. The conjunctiva presents the appearance of a simple purulent conjunctivitis but with little or no formation of pus. Small areas of pseudo-membrane are not infrequent and when removed leave either small white dotted points or some bleeding points. The bulbar conjunctiva becomes

edematous early. At this stage, there is some lacrimation and photophobia, but real pain and blepharo-spasm do not appear until the cornea becomes involved.

The percentage of cases in which corneal involvement occurs varies from 50% to 90%. In six to twelve days after the conjunctivitis appears, the cornea becomes involved by the appearance of discrete gray infiltrates that lie in and immediately under the epithelial layer of the cornea. They may be confined to the periphery of the cornea but in a large percentage of cases involve the pupillary area of the cornea directly. These infiltrates are discrete and seldom become complicated by an erosion of the corneal epithelium with resultant staining with fluorescein. The extent of visual impairment depends upon the number of infiltrates and their location.

Clinical Course: The disease is self-limited. In the majority of instances, the conjunctivitis disappears spontaneously in 14 to 18 days. The corneal complication may disappear in seven days or may last for many months. The longer they persist the greater is the danger of permanent visual impairment.

Laboratory Findings: Scrapings of the conjunctiva show a preponderance of monocytes. Cultures and smears are either negative or show the usual contaminations.

Treatment: There is no specific treatment that has shown a definite influence upon the course of the disease. During the acute stage the eyes should be kept clean with irrigations of boric acid, normal saline, or one to five thousand oxy-cyanid of mercury. If there is much photophobia, 1 per cent holocaine may be instilled at frequent intervals. Five per cent sulfathiazole ointment has been used, as has 5 per cent solution of sodium sulfathiazole sesquihydrate. For persistent corneal infiltrates, X-ray has seemingly yielded some results.

Period of Infectivity: It is not yet known how long the danger of transmission to others exists. At present for practical purposes a sufferer from Epidemic Kerato-conjunctivitis may be allowed to return to work when the active conjunctivitis has disappeared.

Preventive Measures: At present the only preventive measure known is complete isolation of infected persons. Inasmuch as the disease has been transmitted through medical personnel, the most meticulous asepsis must be insisted upon. Not only must physicians and nurses wash their hands thoroughly with soap and water after each patient, but also eye droppers, solutions, instruments, etc., must be sterilized to prevent

infection of non-contaminated persons. The infected individual must be told of the danger of transmission of this disease to others, not only in the plant, but even in the home surroundings. It is suggested that in industrial plants where Epidemic Kerato-conjunctivitis has made its appearance the following methods of procedure be adopted:

1. In smaller plants with a limited personnel, every individual with a red eye should be stopped at the entrance of the plant and sent direct to the plant physician to determine whether or not Epidemic Kerato-Conjunctivitis is present.
In larger plants where such a procedure is not possible, supervisors and foremen should be instructed in detail to make rounds immediately when a fresh shift starts, and send any individual with a red eye to the medical office.
2. If the cases are to be treated at the medical department of the plant, a separate room should be set aside for such cases and in that room there must be exercised the most scrupulous asepsis even to washing off the arms of the chairs in which the patients sit. Aside from the aseptic and separate care of the recognized cases of the disease, special cleanliness of the hands of the physician in the general clinic should be maintained, with the use of an effective disinfectant between cases, lest the infection be spread by means of undiagnosed cases, especially those suspected of having foreign bodies in the eye.
3. Every case of Epidemic Kerato-conjunctivitis should be excluded from the communal facilities of the plant until the inflammation has subsided to the point where the plant physician considers it no longer transmissible.
4. Explicit instructions should be given to every individual regarding the danger of transmission, and emphasizing the decrease in the war effort as a result of the time lost from Epidemic Kerato-conjunctivitis.
5. The local health authorities should be notified immediately of the existence of individual cases.

This statement has been prepared jointly by the United States Public Health Service and the Committee on Industrial Ophthalmology of the American Medical Association, for distribution to all physicians.

The President's Page



MEDICINE AND CIVILIZATION

Not so long ago a famous scientist discoursed on medicine's responsibility for the survival of the unfit and the aged, thus producing for society and civilization great social problems. His contention was that modern medicine had altered the balance of populations which were previously determined by the principle of "the survival of the fittest." Years ago the more sturdy lived through the diseases of infancy and withstood the hardships of life. These were the people, he maintained, who deserved to live and reproduce themselves because they represented strong mental and physical constitutions. He charged that now weak and sickly children with almost any kind of mental and physical capacities are carried through life by the advances of modern medicine. The diseases of middle and advanced life, he pointed out, formerly prevented old-age security from becoming a popular issue. In other words, his conclusion is that modern medicine is responsible for the big load that society is having to carry today because of the fact that modern medicine has made it possible for millions of inferior children, maimed and handicapped adults, and old people to live. His charge is that the world is filled with hordes of unfit people who are social and economic liabilities and that modern medicine must take credit to a great extent for this situation.

What a charge! What a cynic this man is! Life is as sweet to the savage as it is to this man living in the cultured atmosphere of one of our most outstanding universities. Medicine now, and always has, placed emphasis on the value of the human being. Thank God, OUR field of science does not take his cold attitude toward life. Medicine sees a human being in need and its purpose is to relieve that need. Medicine and religion are partners in saving the individual. Each defends the rights of the individual.

The physician's work is quite in contrast with things that are happening in the world today. The present plan in this chaotic world is to PRODUCE human suffering and PROMOTE destruction of life, whereas the physician is striving, in and out of war, to RELIEVE human suffering and PREVENT destruction of life. A paradox, isn't it?

War is destructive to civilization. It halts the progress of civilization. We are in this war not by choice, but because of necessity in the preservation of the principles that have to do with the building of civilization. After this war the world will need individuals who have retained in their souls elements that have, all during the past, contributed to the building of civilization. Physicians constitute a class of society that is interested in human welfare and can be counted on to contribute its part in the reconstruction of the world. The hope of the future world will rest on the shoulders of civilized individuals.



This is my final page. I want to thank the membership of the Arkansas Medical Society for granting me the honor of serving as the president of this fine organization.

Yours for Victory and a Better World,
R. B. (Bob) ROBINS, M.D., President

THE JOURNAL

OF THE

ARKANSAS MEDICAL SOCIETY

Owned by the Arkansas Medical Society and Published
under direction of the Council

W. R. BROOKSHER, M. D., Editor

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EDITORIALS

THE ANNUAL SESSION

This issue of The Journal contains the preliminary program and announcements for the 68th annual session of the Society to be held at the Marion Hotel, Little Rock, April 19th-20th. There will also be found reports from the various committees of the Society made available for the information of the membership and delegates prior to the session and permitting detailed study.

This year's meeting has been shortened one day because of conditions arising out of the war emergency but it is felt that there will be no appreciable decrease in attendance since our annual sessions afford the members an opportunity of acquainting themselves with advances in medicine as well as the opportunity of meeting fellow practitioners over the state to mutual advantage.

It is suggested that members planning to attend the sessions make early reservations for hotel space. All who plan to attend can be accommodated in Little Rock, but advance reservations are more important this year than ever before.

ARMY'S 1943 RECRUITING PROGRAM WILL REQUIRE 6,900 PHYSICIANS

Outline of Procedure Reveals None Will Be Commissioned Until Found Available by Procurement and Assignment Service

The 1943 recruiting programs of the Surgeon General of the Army calls for the commissioning of 6,900 physicians and approximately 3,000 hospital interns and residents, it is reported in The Journal of the American Medical Association for March 13th in an outline of the new procedure of processing physicians, dentists and veterinarians for the Army. The program also calls for the commissioning of 4,800 dentists and 900 veterinarians.

Physicians will be procured from the following twenty states and the District of Columbia: California, Colorado, Connecticut, Illinois, Iowa, Maryland, Massachusetts, Minnesota, Missouri, Nebraska, Nevada, New Hampshire, New Jersey, New York, Ohio, Oregon, Pennsylvania, Rhode Island, Vermont, and Wisconsin.

The following states have already contributed more physicians to the armed forces than the sum of their 1942 and 1943 quotas and will not be called on to furnish any more physicians, except interns and residents and except special cases for specific position vacancies during 1943: Alabama, Arizona, Delaware, Georgia, Idaho, Kentucky, Louisiana, Mississippi, New Mexico, North Carolina, South Carolina, Tennessee, Texas, West Virginia, and Wyoming.

It is stated that at present there will be no procurement of physicians, except interns and residents and in special cases for specific position vacancies, in those states not listed above. There will no procurement of dentists, except special cases for specific position vacancies, in the following sixteen states: Alabama, Arizona, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Mississippi, New Mexico, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, and Virginia.

At the present time there are no restrictions on the recruiting of veterinarians.

In the instructions issued by the Army it is pointed out that the Surgeon General has discontinued all medical officer recruiting boards and that under the new procurement program no physician, dentist or veterinarian will be commissioned in the armed forces of the United States until he has been declared "available" by the Procurement and Assignment Service of the War Manpower Commission.

In each state the Procurement and Assignment Service has set up three state chairmen: medical, dental and veterinary. Each of these prepares a monthly quota list of physicians, dentists and veterinarians who are apparently suitable and who are available, for commissioning in the Army of the United States. This list is submitted to the central office of the Procurement and Assignment Service which sends a communication inviting such individuals to apply for service with the armed forces. On the reply card enclosed with the invitation the individual states his preference for the Army, Navy or Medical Department of the Air Forces. These reply cards are sent by the potential applicants to the state chairmen of the Procurement and Assignment Service who in turn submit lists of such potential applicants to the Officer Procurement Service of the Army.

On receipt of such lists the officer procurement district office contacts the potential applicant and arranges for an interview regarding a commission.

Applicants will be requested by the officer procurement district office to complete all papers and take all steps required of them within fourteen days of the date of such request. If this is not complied with, a report thereon will be transmitted by the officer procurement district office to the state chairman of the Procurement and Assignment Service.

The decision as to the grade and appointment to be recommended for each candidate rests with the Surgeon General, not with the Officer Procurement Service.

CANCER CONTROL

April is designated as Cancer Control Month. During the month, the Women's Field Army of the American Society for the Control of Cancer, will send forth thousands of volunteer workers in its annual campaign to enlist fighters against this dread disease.

The annual toll of cancer in the United States is over 160,000 persons. It has been adequately demonstrated to the profession that much is being done for the cure and relief of these sufferers. Thousands of people today are "cancer cures." It remains but to carry the message of hope to the many thousands of our fellow citizens who feel that nothing can be done against

the disease; that it is an enemy which cannot be defeated.

In Arkansas, the Women's Field Army is sponsored by the Auxiliary to the Arkansas Medical Society and works under an executive committee, the Committee on Cancer Control of the Arkansas Medical Society. It has done, and continues to do, valuable work in the education of the public. It well merits the active cooperation and the enthusiastic support of the medical profession.

COMMUNIQUE

Bushnell General Hospital,
Brigham City, Utah,
March 10, 1943.

To the Editor:

I am having an interesting time in the work here. We have an immense hospital which I understand is identical with the Kennedy General at Memphis. We are full of patients and have numerous casualties from overseas. The number of orthopedic conditions is unbelievable. A great variety of other conditions are also on hand.

We are finding Utah to be an unusual country. The hunting was fine in the fall. There is a good crowd here and things in general are very satisfactory.

Best regards.

Yours sincerely,

Henry G. Hollenberg,
Lt. Col., M. C.,
Chief of Surgical Service.

THERE HAVE BEEN RUMORS THAT PABLUM IS OFF THE MARKET

Pabena, the new Pablum-like precooked oat cereal, does not replace Pablum. Pabena is now being marketed in addition to Pablum.

Pabena offers substantially all of the nutritional qualities of Pablum and all of its advantages of ease of preparation, convenience and economy. The base of Pabena is oatmeal (85%) which gives it a fine flavor and offers variety to the diet.

Would you like some of both for use in your own family?

Mead Johnson & Company, Evansville, Ind.
U. S. A.

Preliminary Program and Announcements

OF THE

SIXTY-EIGHTH ANNUAL SESSION OF THE

ARKANSAS MEDICAL SOCIETY

LITTLE ROCK

APRIL 19, 20, 1943

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First District—Clay, Crittenden, Craighead, Greene, Lawrence, Mississippi, Poinsett and Randolph counties. F. H. Jones, Piggott. Term of office expires 1943.

Second District—Cleburne, Fulton, Independence, Izard, Jackson, Sharp, Stone and White counties. L. T. Evans, Batesville. Term of office expires 1944.

Third District—Arkansas, Cross, Lee, Monroe, Phillips, Prairie, Saint Francis and Woodruff counties. J. O. Rush, Forrest City. Term of office expires 1943.

Fourth District—Ashley, Bradley, Chicot, Cleveland, Desha, Drew, Jefferson and Lincoln counties. S. W. Douglas, Eudora. Term of office expires 1944.

Fifth District—Calhoun, Columbia, Dallas, Lafayette, Ouachita and Union counties. B. L. Moore, El Dorado. Term of office expires 1943.

Sixth District—Hempstead, Howard, Little River, Miller, Nevada, Pike, Polk and Sevier counties. C. E. Kitchens, DeQueen. Term of office expires 1944.

Seventh District—Clark, Garland, Hot Spring, Montgomery and Saline counties. Geo. B. Fletcher, Hot Springs National Park. Term of office expires 1943.

Eighth District—Conway, Faulkner, Grant, Lonoke, Perry, Pope, Pulaski, Van Buren and Yell counties. Jos. F. Shuffield, Little Rock. Term of office expires 1944.

Ninth District—Baxter, Boone, Carroll, Marion, Newton and Searcy counties. J. F. John, Eureka Springs. Term of office expires 1943.

Tenth District—Benton, Crawford, Franklin, Johnson, Logan, Madison, Sebastian, Scott and Washington counties. Clyde McNeil, Rogers. Term of office expires 1944.

STANDING COMMITTEES

(Appointments expire with annual session of the year indicated.)

SCIENTIFIC WORK—H. King Wade, Chairman, Hot Springs National Park (1944); W. R. Brooksher, Fort Smith (ex-officio); †Euclid M. Smith, Hot Springs Na-

tional Park (1943); †Joe H. Sanderlin, Little Rock (1945).

MEDICAL LEGISLATION—Jos. F. Shuffield, Chairman, Little Rock (1943); C. W. Dixon, Gould (1943); S. J. Wolferman, Fort Smith (1944); M. L. Norwood, Locksburg (1944); W. G. Hodges, Malvern (1945).

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PUBLIC RELATIONS—W. T. Wootton, Chairman, Hot Springs National Park (1945); H. A. Rands, Dumas (1943); †J. M. Kolb, Clarksville (1944).

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NECROLOGY—O. J. T. Johnston, Chairman, Batesville (1945); *W. A. Snodgrass, Little Rock (1944); C. A. Archer, DeQueen (1945); E. F. Ellis, Fayetteville (1944); W. H. Mock, Prairie Grove (1944).

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* Deceased.

† In Military Service.

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STUDY OF MIDWIFERY—J. B. Jameson, Chairman, Camden; Roy I. Millard, Russellville; B. J. Reaves, Little Rock; E. A. Callahan, Carlisle; M. C. Hawkins, Jr., Searcy.

LIAISON WITH ARKANSAS TUBERCULOSIS ASSOCIATION—A. C. Shipp, Chairman, Little Rock; S. C. Fulmer, Little Rock; J. D. Riley, State Sanatorium; †W. P. Ward, Fordyce; W. H. Bruce, Pine Bluff.

INDUSTRIAL HEALTH—E. E. Barlow, Chairman, Dermott; S. J. Allbright, Searcy; Fred W. Harris, Little Rock; †J. Donald Hayes, Little Rock; M. E. Foster, Fort Smith; S. A. Drennen, Stuttgart.

MENTAL HYGIENE—N. T. Hollis, Chairman, Little Rock; Geo. B. Fletcher, Hot Springs National Park; A. C. Kolb, Little Rock; Elizabeth Fletcher, Little Rock; Pat Murphey, Little Rock.

* Deceased.

† In Military Service.

LOCAL COMMITTEES

Host County Society—Pulaski County Medical Society.

GENERAL COMMITTEE—Jos. F. Shuffield, Bryce Cummins, co-chairmen; Glenn Johnson, J. Harry Hayes.

ARRANGEMENTS—Carl A. Rosenbaum, F. Walter Caruthers, co-chairmen; L. G. Holt, Lamar McMillin.

ENTERTAINMENT—Bryce Cummins, chairman; P. G. Autry, W. J. Schwarz, J. A. Summers, Jeff Banks.

RECEPTION—R. M. Eubanks, chairman; H. Fay H. Jones, S. C. Fulmer.

SCIENTIFIC EXHIBITS—M. J. Kilbury, W. C. Langston, co-chairmen; Paul C. Eschweiler, J. K. Donaldson, E. L. Wilbur.

COMMERCIAL EXHIBITS—Jos. F. Shuffield, Hoyt R. Allen, H. W. Hundling.

PUBLICITY—D. A. Rhinehart, chairman; H. A. Dishongh.

ANNOUNCEMENTS

REGISTRATION

The registration desk will be located in the Marion Hotel and will be open from 8:00 A.M. to 5:00 P.M. Monday, April 19th; from 8:00 A.M. to 2:00 P.M., Tuesday, April 20th and from 3:00 P.M. to 5:00 P.M., Sunday, April 18th. Members of the Pulaski County Medical Society are requested to register on Sunday afternoon, April 18th, to avoid congestion after opening of the session. Delegates are requested to register as early as possible, presenting credentials at the time of registration. Members and visitors are requested to register and receive the official badge and program. Admission to all sessions will be by badge. Bring your 1943 registration card to facilitate registration. Members of the American Medical Association from any state may register as guests.

MEETINGS OF THE COUNCIL

The Council of the Arkansas Medical Society, including the Past-Presidents, will meet at noon, April 19th and 20th, in a private dining room, Marion Hotel, immediately following the adjournment of the morning session.

PAST-PRESIDENT'S BREAKFAST

The Past-Presidents of the Society will convene in their annual breakfast session Tuesday, April 20th, in a private dining room, Marion Hotel, at 7:30 A.M.

PROGRAM

HOUSE OF DELEGATES

First Meeting, Marion Hotel
Monday, April 19th, 9:00 A.M.

President R. B. Robins, Presiding

Calling meeting to order.

Roll call of delegates.

Report of Credentials Committee.

Introduction of Fraternal Delegates.

Adoption of Minutes of the Sixty-seventh Annual Session, published in the June, 1942, issue of The Journal of the Arkansas Medical Society.

Appointment of Reference Committee.

President's Address to the House of Delegates.

REPORT OF COMMITTEES

(Limited to ten minutes by House of Delegates,
1942 session)

SCIENTIFIC WORK—H. King Wade, Chairman.

MEDICAL LEGISLATION—Jos. F. Shuffield, Chairman.

HEALTH AND PUBLIC INSTRUCTION—W. B. Grayson, Chairman.

MEDICAL EDUCATION AND HOSPITALS—M. J. Kilbury, Chairman.

PUBLIC RELATIONS—W. T. Wootton, Chairman.

MEDICAL ECONOMICS—H. E. Mobley, Chairman.

SCIENTIFIC EXHIBIT—Sam Phillips, Chairman.

NECROLOGY—O. J. T. Johnston, Chairman.

CANCER CONTROL—Fred Hames, Chairman.

HEART—A. A. Gilbert, Chairman.

STUDY OF MIDWIFERY—J. B. Jameson, Chairman.

MATERNAL AND CHILD WELFARE—S. A. Thompson, Chairman.

POSTGRADUATE STUDY—D. A. Rhinehart, Chairman.

AUXILIARY—J. A. Moore, Chairman.

CONTROL OF SYPHILIS—W. P. Scarlett, Chairman.

LIAISON WITH ARKANSAS TUBERCULOSIS ASSOCIATION—A. C. Shipp, Chairman.

INDUSTRIAL HEALTH—E. E. Barlow, Chairman.

MENTAL HYGIENE—N. T. Hollis, Chairman.

REPORT OF THE STATE MEDICAL BOARD OF THE ARKANSAS MEDICAL SOCIETY—D. L. Owens, Secretary.

REPORT OF THE DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION—E. E. Barlow, Dermott.

REPORT OF THE COUNCIL—Clyde McNeil, Chairman.

REPORT OF THE TREASURER—Paul L. Mahoney, Little Rock.

REPORT OF THE SECRETARY—W. R. Brooksher, Fort Smith.

REPORT OF COUNSEL—Hon. Peter A. Deisch, Helena.

REPORT OF FRATERNAL DELEGATES.

NEW BUSINESS.

SELECTION OF THE NOMINATING COMMITTEE.

SCIENTIFIC SESSION**MONDAY AFTERNOON, APRIL 19th, 1:30 P.M.**

CALLING THE SOCIETY TO ORDER—R. B. Robins, President.

INVOCATION—The Rt. Rev. Msgr. John J. Healy, Director of Catholic Hospitals, Diocese of Little Rock.

ADDRESS OF WELCOME—Alan G. Cazort, President, Pulaski County Medical Society.

RESPONSE FOR THE ARKANSAS MEDICAL SOCIETY—

S. A. Drennen, Third Vice-president, Stuttgart.

PRESIDENT'S ADDRESS—R. B. Robins, Camden.

INTRODUCTION OF W. T. WOOTTON, Hot Springs National Park, President-Elect, Southern Medical Association.

"Surgery of the Gallbladder and Common Duct"—R. L. Sanders, Memphis.

"New Concepts in the Diagnosis and Treatment of Poliomyelitis (Lantern slides and motion pictures), F. Walter Carruthers, Little Rock.

"Industrial Dermatoses"—D. W. Goldstein, Fort Smith.

"Analysis of Thyroid Surgery" (Little Rock Hospitals), J. Harry Hayes, Little Rock.

MONDAY, APRIL 19th, 6:00 P.M.**Marion Hotel**

The Pulaski County Medical Society will entertain with a buffet dinner honoring the members and visitors.

PUBLIC MEETING**MONDAY, APRIL 19th, 8:30 P.M.**

CALLING THE MEETING TO ORDER—Alan G. Cazort, President, Pulaski County Medical Society.

INVOCATION—Dr. Marion A. Boggs, Second Presbyterian Church.

INTRODUCTION OF R. B. ROBINS, President, Arkansas Medical Society, Camden.

INTRODUCTION OF HONOR GUESTS.

ADDRESS—"The Medical Auxiliary in Wartime," Mrs. Richard Clark, President, Woman's Auxiliary to the Southern Medical Association, Hattiesburg, Mississippi.

ADDRESS—"The War and Medical Education," John H. Musser, New Orleans.

BENEDICTION—Dr. Marion A. Boggs, Second Presbyterian Church.

SCIENTIFIC SESSION**TUESDAY MORNING, APRIL 20th, 8:30 A.M.**

"Care of the Insane in the State of Arkansas" (with motion pictures), Geo. B. Fletcher, Hot Springs National Park.

"Leukemia and Aleukemic Diseases," M. J. Kilbury, Little Rock.

"The Doctor's Heart," John H. Musser, New Orleans.

"A Safe and Sane Method of Treatment in Neurosyphilis," L. G. Martin, Hot Springs National Park.

"Peptic Ulcer" (sound motion picture), Lahey Clinic, Boston.

MEMORIAL SESSION**TUESDAY, APRIL 20th, 11:30 A.M.**

CALLING MEETING TO ORDER—R. B. Robins, President.

INVOCATION—Rev. Fred R. Harrison, Pulaski Heights Methodist Church.

MUSIC—Selected Numbers

Mrs. Lawrence Witherspoon

Mrs. William F. Clements

Mrs. I. B. Richardson

Mrs. H. D. Mayer

Mrs. H. E. Riley

Mrs. W. R. Richardson

Mrs. Conrad Farrell, Accompanist

READING OF NAMES OF DECEASED MEMBERS OF THE AUXILIARY—Mrs. E. D. McKnight, Brinkley.

ADDRESS—O. J. T. Johnston, Batesville, Chairman, Committee on Necrology.

BENEDICTION—Rev. Fred Harrison, Pulaski Heights Methodist Church.

IN MEMORIAM

Orlando Conrad Hankinson, Pine Bluff, April 14, 1942

James William John, Pine Bluff, May 2, 1942

Orlie Parker, Wabash, May 11, 1942

Frank A. Gray, Batesville, May 18, 1942

James Louis Post, Van Buren, May 24, 1942

Dred D. Dorente, Fort Smith, June 17, 1942

Frank Prior Hardy, Searcy, June 22, 1942

Rufus W. Ratliff, Jonesboro, June 23, 1942

Joseph Stephen Westerfield, Conway, June 28, 1942

Leon E. King, Hot Springs, July 10, 1942

John Henry Weaver, Hope, July 15, 1942

Benjamin Comer Routon, Ashdown, July 19, 1942

Jeff T. Holcombe, Mineral Springs, August 5, 1942

Clyde Vernon Powell, Forrest City, August 13, 1942

John M. Stewart, Van Buren, August 17, 1942

Frank Vinsonhaler, Little Rock, September 1, 1942

John W. Ringgold, Ashdown, September 8, 1942

Robert Joseph Haley, Sr., Paragould, September 14, 1942

Harry Thomas Harr, Fayetteville, September 16, 1942

James Monroe Matthews, Morrilton, September 25, 1942

Otto Ralph Honomichl, Hackett, October 3, 1942

Estes Allen, Little Rock, October 17, 1942

Charles A. Lumsden, DeWitt, October 27, 1942

James T. Powell, Gravette, October 28, 1942

Jesse G. Hilton, Mena, November 8, 1942

Charles E. Bayan, Chester, November 27, 1942

G. Max Watkins, Walnut Ridge, November 29, 1942

Hedric Arnold Ross, Arkadelphia, December 18, 1942

William A. Snodgrass, Little Rock, January 4, 1943

Richard T. Henry, Springdale, January 4, 1943

George W. Ringgold, Gould, January 26, 1943

James M. Lemons, Pine Bluff, February 3, 1943

Charles Augusta Caldwell, Blytheville, February 8, 1943

Arthur Lee Goatcher, Plumerville, February 25, 1943

Howard Paxton Collings, Hot Springs, March 4, 1943

HOUSE OF DELEGATES**FINAL SESSION****TUESDAY, APRIL 20th, 1:30 P.M.**

CALLING THE MEETING TO ORDER—R. B. Robins, President.

ROLL CALL

REPORT OF THE NOMINATING COMMITTEE

ELECTION OF OFFICERS

President-Elect

First Vice-President

Second Vice-President

Third Vice-President

Treasurer

Secretary

Five Councilors

Delegate to the American Medical Association

Alternate to the American Medical Association

REPORT OF THE REFERENCE COMMITTEE

REPORT OF COMMITTEES

NEW BUSINESS

ADJOURNMENT

FINAL GENERAL SESSION**TUESDAY, APRIL 20th****(Immediately following the adjournment of the Final Session of the House of Delegates)**

CALLING THE MEETING TO ORDER—R. B. Robins, President.

UNFINISHED BUSINESS

PRESENTATION OF PRESIDENT S. J. ALLBRIGHT

PRESENTATION OF PRESIDENT-ELECT

NEW BUSINESS

SELECTION OF PLACE OF NEXT MEETING

ADJOURNMENT SINE DIE

RANDOM THOUGHTS OF THE SECRETARY

February 28th. Lt. Col. Price comes to town with army special T-bone steaks from Camp Gruber which we enjoy to the fullest extent. Then, this evening, Frances and Charlie Chamberlain entertain featuring shrimp Creole, after which we engage in much medical discussion with the U. S. Marshall and a printer, whiling away a most pleasant evening with no regard whatsoever for point-rationing to start on the morrow.

March 1st. Journeying with Wolfermann and Eberle to Ed White's ranch atop the Cooksons near Muskogee, the going trip devoted in its entirety to a discussion of agriculture as practiced by Eberle from which Sid hoped to obtain information sufficient to establish himself as a self-supporting meat producer. At the Muskogee crowd's party many of the Camp Gruber medical officers are present, including Arkansas' sole representative, Walls of Blytheville, who looks well enough and seems quite happy over his lot. Homeward, the back seat serves as a comfortable bed and we sleep the miles away to the home town main drag.

March 5th. Making rounds with Joe Shuffield this morning at Baptist Hospital and conversing with Eubanks, Cosgrove, Brooks, McCaskill and others about the halls. Discussing plans for the wartime session of the Society at noon with the Pulaski County committeemen and hearing much of ideas on the entertainment. Tony Melson publicly approves of the President's Page for March and Robins smiles. Finally conferring with Host Byrnes at the Marion whose urbanity is somewhat disturbed these days by the point system and who admits not so much interest in banquets and luncheons as formerly.

March 6th. The Camp Chaffee Service Command holds forth in a Saturday night festival and as dinner guests of the Colonel Gradys, we hear Stanley Gates' most recent tale—that of the massive skin graft from the abdomen to the arm whereby the patient now sports his appendectomy scar on his wrist.

March 9th. Newman addresses in excellent manner on the intervertebral disk this evening and his is the most explicit discussion we have yet heard. Then to our place where the postmortem is conducted by Newman, Eberle and Chamberlain with much comment on procurement and assignment, medicine and unrelated subjects.

March 19th. Passing through the city Ken Thompson, glib with army phrases and tales of experiences at Carlisle and Camp Robinson, moves on to take station down in Louisiana.

March 20th. Presiding tonight at a dinner for 150 WAACS, we find that the support of Jones, Goldstein and Tow does not help against this numerically superior force.

PROCEEDINGS OF SOCIETIES

Lonoke County Medical Society has elected the following officers: President, S. S. Beaty; Vice-president, W. B. Crowgey, and Secretary-treasurer, O. D. Ward.

Jackson County Medical Society has elected the following officers: President, E. L. Watson; Vice-president, G. K. Stephens; Secretary-treasurer, J. B. Ivy; Delegate, H. O. Walker, and Alternate, M. B. Owens.

Ashley County Medical Society has elected the following officers: President, L. C. Barnes; Secretary-treasurer, R. Louis Cope; Delegate, M. C. Crandall, and Alternate, R. Louis Cope.

Carroll County Medical Society has elected the following officers: President, D. C. Roberts; Secretary-treasurer, D. K. McCurry; Delegate, Alvin Butt, and Alternate, D. K. McCurry.

Montgomery County Medical Society has elected the following officers: President, J. B. Steuart; Vice-president, G. E. Watkins; Secretary-treasurer, J. H. McLean; Delegate, J. H. McLean, and Alternates, G. E. Watkins and W. D. Freeman.

The Pulaski County Medical Society was addressed March 1st by M. J. Kilbury on "Leukemic and Aleukemic Diseases."

Elizabeth Fletcher, Secretary.

The Benton County Medical Society met in dinner session at Bentonville March 11th for case reports by Drs. W. A. Pickens and R. M. Atkinson.

Geo. M. Love, Secretary.

The Ouachita County Medical Society met in regular monthly session March 4th at the Camden Hospital. The program consisted entirely of medical movies. The following subjects were presented: "The Sulfonamides"; "The Care of the Premature Infant"; "X-rays in Obstetrics"; and "Appendicitis in Children."

R. B. Robins, Secretary.

The Craighead-Poinsett County Medical Society was addressed March 4th by Capt. James R. Faulk, Walnut Ridge Air Base, "Ophthalmic Surgery," and Capt. Maurice E. Bartlett, "Virus Pneumonia," Walnut Ridge Air Base.

J. H. McCurry, Secretary.

The Sebastian County Medical Society was addressed March 9th by W. Vernon Newman, Little Rock, on "Intervertebral Disk Lesions." The following were elected delegates, S. J. Wolfermann and I. F. Jones; alternates, W. G. Eberle and Chas. T. Chamberlain.

W. F. Adams, Secretary.

The Miller-Bowie Counties Medical Society met in dinner session at Texarkana March 19th for the following program: "Clinical Aspects of Four Venereal Diseases," Earl H. Smith.

H. K. Abrams, Secretary.

Lincoln County Medical Society has elected the following officers: President, B. L. Bailey; Vice-President, G. C. Wood, and Secretary-Treasurer, C. W. Dixon.

Columbia County Medical Society has elected the following officers: President, P. M. Smith; Secretary-Treasurer, J. J. Baker; Delegate, W. P. Cooksey, and Alternate, J. H. Wilson.

OBITUARY

HOWARD PAXTON COLLINGS, age 78, Hot Springs National Park, died March 4th. Born at Rockville, Indiana, January 30, 1865, he graduated from Central College, Danville, Indiana, and received his medical degree from Bellevue Hospital Medical College, New York, in 1891, serving an internship at Saint Vincent's Hospital, New York, following completion of his medical school work. Actively interested in spas, he traveled extensively in Europe, lecturing and studying there on three occasions, 1912, 1913 and 1924. Prominent in Masonic circles, he was a member of all of the lodges. He was one of the oldest members of the Hot Springs Kiwanis Club, a member of Saint Joseph's hospital board and had served as a director of the Security Bank. He was a past-president of the Garland County Medical Society, a fellow of the American Medical Association, an honorary member of the Arkansas Medical Society, a fellow of the American College of Surgeons, the American Urological Society. He had been an extensive writer in medical literature. Surviving relatives are two sons and two daughters.

PERSONALS AND NEWS ITEMS

J. B. Jameson has been elected a director of the Camden Chamber of Commerce.

C. S. Moss has opened an office for practice at 1401 Medical Arts Building, Hot Springs National Park.

W. A. Pickens, Bentonville, has been appointed Benton County health officer.

Ira Ellis, Monette, and P. W. Lutterloh have been elected directors of the Craighead County Chapter, American Red Cross.

J. Leo Aday, Little Rock, now on duty with the Air Depot Training Station hospital, Albuquerque, has been promoted to captain.

T. K. Mahan, Blytheville, now on duty with the 217th C A (A-a), Berkeley, California, has been promoted to captain.

Chas. T. Chamberlain, Fort Smith, addressed the Rotary and Noon Civics clubs of that city in the interest of the Red Cross War Fund campaign recently.

Merle T. Crow, Warren, now stationed at Fort Bliss, Texas, has been promoted to Captain, Medical Corps, Army of the United States.

Capt. W. Max Brown, formerly of Clarendon, has been transferred from Camp Blanding, Fla., to Camp Bowie, Texas, where he will command the 17th Field Hospital.

Robert L. Taylor, Conway, now stationed at Camp Berkeley, has been promoted to Captain, Medical Corps, Army of the United States.

BORN—A son, on February 28th, to Captain and Mrs. S. B. Thompson, Camp Howze, Texas.

W. E. Ellington, Paragould, has been appointed health director for Greene County.

H. Fay H. Jones, Hoyt R. Allen and Paul L. Mahoney, Little Rock, spent a recent vacation in Mexico.

Robert Watson, Little Rock, has successfully passed examination as a diplomate of the American Board of Neurological Surgery.

Lt. J. K. Thompson, Fort Smith, has been assigned for duty with the 11th Armored Division, Camp Polk, Louisiana.

A. C. Kolb, Little Rock, has passed examinations as a diplomate of the American Board of Neurology and Psychiatry.

J. K. Donaldson, Little Rock, has been appointed Major, Medical Corps, Army of the United States, and assigned to Carlisle Barracks, Pennsylvania.

Lt. (j. g.) Max Baldridge, Medical Corps, Naval Reserve, Conway, has been promoted to Lieutenant.

Henry G. Hollenberg, Little Rock, now stationed at Bushnell General Hospital, Brigham City, Utah, has been promoted to Lieutenant Colonel.

"The Use of the Various Insulins in the Treatment of Diabetes Mellitus" by Roy F. Baskett, Texarkana, appeared in the March issue of New Orleans Medical and Surgical Journal.

Capt. J. G. Martindale, Hope, has completed the O. T. S. at Miami Beach and has been assigned to the 18th Replacement Wing, Salt Lake City, Utah.

COMMUNIQUE

Turner Field, Georgia,
March 15, 1943.

To the Editor:

Greetings, and all that sort of thing. I note in the Arkansas Medical Journal that Thomas Foltz is still in the "land of the living." He is one "Joe" who will never be a prisoner, for I believe he could talk his way out of any concentration camp ever developed. By the way, if you ever write brother Foltz, tell him that I am the proud possessor of a Booger Board. Please give my regards to Chamberlain, Hoge and anyone else up there who may remember me.

Yours,
Milton B. Bowman,
Capt., M. C.,
Chief of Surgical Service.

PRELIMINARY PROGRAM AND ANNOUNCEMENTS WOMAN'S AUXILIARY TO THE ARKANSAS MEDICAL SOCIETY NINETEENTH ANNUAL MEETING LITTLE ROCK, ARKANSAS APRIL 19th, 20th, 1943

HEADQUARTERS: MARION HOTEL

HONOR GUESTS OF THE AUXILIARY

Mrs. Frank N. Haggard, San Antonio, Texas, President, Woman's Auxiliary to the American Medical Association.

Mrs. Richard H. Clark, Hattiesburg, Miss., President Woman's Auxiliary to the Southern Medical Association.

Mrs. Wm. H. Hibbits, Texarkana, Texas, National Program Chairman.

OFFICERS

PRESIDENT—Mrs. L. G. Fincher, El Dorado

PRESIDENT-ELECT—Mrs. L. J. Kosminsky, Texarkana

FIRST VICE-PRESIDENT—Mrs. Carl A. Rosenbaum, Little Rock

SECOND VICE-PRESIDENT—Mrs. H. T. Smith, McGehee

THIRD VICE-PRESIDENT—Mrs. L. F. Barrier, Little Rock

FOURTH VICE-PRESIDENT—Mrs. J. K. Walker, Pine Bluff

TREASURER—Mrs. Sam Thompson, Camden

HISTORIAN—Mrs. C. W. Garrison, Little Rock

PARLIAMENTARIAN—Mrs. Fount Richardson, Fayetteville

SECRETARY—Mrs. P. H. Muse, Junction City

PUBLICITY SECRETARY—Mrs. M. E. Foster, Ft. Smith

POET LAUREATE—Mrs. George B. Fletcher, Hot Springs

ADVISORY BOARD

Dr. J. A. Moore, Chairman, El Dorado

Dr. M. L. Dalton, Brinkley

Dr. E. C. Moulton, Ft. Smith

Dr. C. A. Rosenbaum, Little Rock

Dr. R. L. Taylor, Conway

COUNCILORS

Mrs. C. W. Jones, Benton

Mrs. J. B. Crawford, Little Rock

Mrs. C. E. Kitchens, DeQueen

Mrs. Alfred Hathcock, Fayetteville

Mrs. C. A. Churchill, Batesville

COUNCILWOMAN TO THE WOMAN'S AUXILIARY
TO THE SOUTHERN MEDICAL ASSOCIATION—
Mrs. W. R. Brooksher, Ft. Smith

COMMITTEE CHAIRMEN

1942-1943

ORGANIZATION—Mrs. C. A. Rosenbaum, Little Rock

EDUCATION AND PUBLIC HEALTH—Mrs. H. T. Smith, McGehee

HYGEIA—Mrs. L. F. Barrier, Little Rock

PUBLIC RELATIONS—Mrs. J. K. Walker, Pine Bluff

ISLE F. OATES STUDENT LOAN FUND—Mrs. C. E. Oates, Little Rock

PHYSICAL HEALTH EXAMINATIONS—Mrs. Fred P. Hames, Pine Bluff
 MEMORIAL AND CHAPLAIN—Mrs. E. D. McKnight, Brinkley
 DOCTOR'S DAY OBSERVANCE—Mrs. I. F. Jones, Ft. Smith
 ARCHIVES—Mrs. O. J. T. Johnston, Batesville
 ESSAY CONTEST—Mrs. H. L. Brown, Malvern
 CONSTITUTION AND BY-LAWS—Mrs. H. King Wade, Hot Springs
 CANCER CONTROL—Mrs. W. R. Brooksher, Ft. Smith
 JANE TODD CRAWFORD MEMORIAL—Mrs. J. M. Kolb, Clarksville
 FINANCE—Mrs. B. A. Rhinehart, Little Rock
 LEGISLATION—Mrs. Charles Lutterloh, Hot Springs
 LIBRARY FUND COMMITTEE—Mrs. A. C. Shipp, Little Rock
 BIOGRAPHY COMMITTEE—Mrs. Chas. W. Dixon, Gould; Mrs. C. W. Garrison, Little Rock, co-chairmen.
 CIRCULATION MANAGER OF THE BULLETIN—Mrs. R. B. Robins, Camden

DISTRICT COUNCIL WOMEN

FIRST—Mrs. H. S. Watson, Earle
 SECOND—Mrs. F. A. Gray, Batesville
 THIRD—Mrs. C. W. Rasco, Jr., DeWitt
 FOURTH—Mrs. C. W. Dixon, Gould
 FIFTH—Mrs. M. V. Russell, El Dorado
 SIXTH—Mrs. Ralph Cross, Texarkana
 SEVENTH—Mrs. D. B. Stough, Hot Springs
 EIGHTH—Mrs. D. W. Fulmer, Little Rock
 NINTH—Mrs. Ross Fowler, Harrison
 TENTH—Mrs. S. J. Wolferman, Ft. Smith

COUNTY PRESIDENTS

ARKANSAS—Mrs. M. C. John, Jr., Stuttgart (Mrs. M. C. John, Sr., Stuttgart)*
 CRAIGHEAD-POINSETT—Mrs. O. T. Cohen, Jonesboro.
 CRITTENDEN—Mrs. H. S. Watson, Earle
 FRANKLIN—Mrs. E. W. Pillstrom, Altus (Mrs. W. C. Porter, Ozark)*
 GARLAND—Mrs. C. H. Lutterloh, Hot Springs (Mrs. H. King Wade, Hot Springs)*
 HOT SPRING—Mrs. M. D. Prickett, Malvern
 INDEPENDENCE—Mrs. Finis Q. Wyatt, Batesville (Mrs. O. J. T. Johnston, Batesville)*
 JEFFERSON—Mrs. Fred P. Hames, Pine Bluff
 JOHNSON—Mrs. G. R. Siegel, Clarksville
 MILLER—Mrs. C. H. Franks, Texarkana
 MONROE—Mrs. E. D. McKnight, Brinkley
 NINTH COUNCILOR DISTRICT—Mrs. J. H. Fowler, Harrison
 NEVADA—Mrs. J. W. Kennedy, Prescott
 OUACHITA—Mrs. S. D. McGill, Camden
 PULASKI—Mrs. C. A. Rosenbaum, Little Rock
 SEBASTIAN—Mrs. J. L. Kellum, Ft. Smith
 SEVIER—Mrs. Pierre Redman, Mena
 SOUTHEAST ARKANSAS MEDICAL AUXILIARY—Mrs. Bryan Barlow, Dermott

UNION COUNTY—Mrs. P. H. Muse, Junction City
 WASHINGTON—Mrs. Louis Hundley, Fayetteville (Mrs. C. B. Paddock, Fayetteville)*

* Note—these are the names of the County Presidents who served in the absence of the Presidents who were in the Armed Forces with their husbands.

TENTATIVE PROGRAM

MONDAY, APRIL 19, 1943

Mezzanine Floor, Hotel Marion

9:00 A. M.—Registration
 11:00 A. M.—Executive Board Meeting
 12:00 Noon—Executive Board Luncheon (all members of the Assembly are invited to attend).
 (Parlor "A"—\$1.12)

GENERAL SESSION

2:00 P. M.—OPENING OF SESSION—Mrs. Carl A. Rosenbaum, President, Woman's Auxiliary to the Pulaski County Medical Society.
 Invocation—Mrs. W. C. Langston, Little Rock.
 Address of Welcome—Mrs. Bryce Cummins, Little Rock.
 Introduction of State President—Mrs. L. G. Fincher, El Dorado.
 Response to Address of Welcome—Mrs. R. B. Robins, Camden.
 Reports of Officers.
 Reports of State Chairmen.
 Introduction of Special Guests.
 Greetings from the Woman's Auxiliary to the Southern Medical Association—Mrs. Richard H. Clark, President.
 Report of the Meeting of the Woman's Auxiliary to the American Medical Association—Read by the Secretary, Mrs. P. H. Muse.
 Report of the Meeting of the Woman's Auxiliary to the Southern Medical Association—Mrs. W. R. Brooksher, Ft. Smith.
 Announcement of Special Committees—Mrs. Carl A. Rosenbaum.
 Report of the Registration Committee—Mrs. Byron A. Bennett.
 Report of the Entertainment Committee—Mrs. Randolph T. Smith.

6:00 P. M.—The Pulaski County Medical Society will entertain with a buffet dinner honoring the members and visitors.

Public Meeting, 8:30 P. M. (see page 248).

GENERAL SESSION

TUESDAY, APRIL 20, 1943

9:30 A. M.—Calling the Meeting to Order—Mrs. L. G. Fincher, President.
 Invocation.
 Reading of the Minutes.
 Address—Dr. R. B. Robins, Camden, President, Arkansas Medical Society.
 Reports of County Auxiliaries.
 Report of the Registration and Credentials Committee.
 Greetings from the Woman's Auxiliary to the American Medical Association—Mrs.



Some men are so clever!

Take my boss for instance . . .

Yesterday, I overheard him talking to another doctor about infant feeding.

"Jim," he said, "I'll tell you why you never have any time to spare. You get yourself tied up with a lot of unnecessary work.

"You believe in prescribing plain cow's milk modified. Haven't you found out that S-M-A* will save you a lot of unnecessary questions? Cut out a lot of bothersome arithmetic?



"Heaven knows, we're busy enough as it is. I'll bet you a couple of tickets for the big game that with S-M-A on the job—your patients won't have to telephone you so often to ask about their baby's formula."

★ ★ ★

Well, you can see why I think my boss is so clever.

Why don't you try S-M-A in your own practice, doctor?

See if you don't like it better.

**BUSY
DOCTORS
TODAY—
PRESCRIBE
S-M-A!**

With the exception of Vitamin C . . . S-M-A is nutritionally complete. Vitamins B₁, D and A are included in adequate proportion . . . ready to feed. Their presence in S-M-A prevents the development of subclinical vitamin deficiencies . . . because the infant gets all the necessary vitamins right from the start.

S-M-A has still another highly important advantage not found in other modified milk formulas. It contains a special fat that resembles breast milk fat . . . resembles it chemically and physically—according to impartial laboratory tests. S-M-A fat is more readily digested and tolerated by most infants than cow's milk fat.

S-M-A IS EASIER
TO PREPARE. ONE
MEASURE OF POWDER
TO EACH OUNCE OF
WARM, BOILED WATER,
COMPLETES THE
FORMULA . . .
TWENTY
CALORIES TO
THE OUNCE



**The infant food that is
nutritionally complete**

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tion of milk sugar and potassium chloride; altogether forming an antirachitic food. When diluted according to directions, it is essentially similar to human milk in percentages of protein, fat, carbohydrate and ash, in chemical constants of the fat and physical properties.

Frank N. Haggard, President.
 Election of Officers.
 Announcement of the Entertainment Committee—Mrs. Randolph T. Smith.
 11:30 A. M.—MEMORIAL SESSION (Joint Meeting with Arkansas Medical Society).
 Calling Meeting to Order—R. B. Robins, President.
 Invocation—Rev. Fred R. Harrison, Pulaski Heights Methodist Church.
 Music—Selected Numbers
 Mrs. Lawrence Witherspoon
 Mrs. William F. Clements
 Mrs. I. B. Richardson
 Mrs. H. D. Mayer
 Mrs. H. E. Riley
 Mrs. W. R. Richardson
 Mrs. Conrad Farrell, Accompanist
 Reading of Names of Deceased Members of the Auxiliary—Mrs. E. D. McKnight, Brinkley.
 Address—O. J. T. Johnston, Batesville, Chairman, Committee on Necrology.
 Benediction—Rev. Fred Harrison, Pulaski Heights Methodist Church.
 1:00 P. M.—LUNCHEON—Officer's Club Lounge, Hotel Marion, \$1.12.
 Toastmistress—Mrs. Carl A. Rosenbaum, President, Woman's Auxiliary to the Pulaski County Medical Society.
 Invocation—Mrs. R. C. Kory, Little Rock.

Introduction of Past-Presidents.
 Introduction of State Officers.
 Introduction of Wives of Officers of the Arkansas Medical Society.
 President's Report.
 Address—Mrs. Frank N. Haggard, San Antonio, Texas, President, Woman's Auxiliary to the American Medical Association.
 Address—Mrs. Wm. H. Hibbits, Texarkana, Texas, National Program Chairman.
 Poem—Mrs. George B. Fletcher, Poet Laureate.
 Unfinished Business.
 Report of the Committee on Courtesy Resolutions.
 Installation of Officers—Mrs. Richard H. Clark, Hattiesburg, Miss.
 Presentation of Gavel—Mrs. L. G. Fincher, El Dorado.
 Address of Incoming President—Mrs. L. J. Kosminsky, Texarkana.
 4:00 P. M.—POST-CONVENTION BOARD MEETING—Mrs. L. J. Kosminsky presiding.

SPECIAL COMMITTEES (LOCAL)

ENTERTAINMENT—Mrs. Randolph T. Smith
 REGISTRATION—Mrs. Byron A. Bennett
 FLOWERS—Mrs. D. A. Rhinehart
 PUBLICITY—Mrs. Estes Allen
 COURTESY—Mrs. Paul C. Eschweiler

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AMERICAN MEDICAL ASSOCIATION
 AMERICAN COLLEGE OF SURGEONS
 AMERICAN HOSPITAL ASSOCIATION

ACCREDITED FOR INTERNSHIP AND RESIDENCY
 TRAINING

Doctor, *Write* this down in your Appointment Book *Now!*

- Date—Monday and Tuesday, April 19th and 20th
- Place—Wm. T. Stover Co.'s Exhibit, Marion Hotel, Little Rock, Arkansas
- Occasion—68th Annual Meeting Arkansas State Medical Society

Doctor, please accept our invitation to visit our two big booth displays, where welcome is written on our doormat and the latchstring hangs outside. See the latest in new equipment. Leave your coat, hat and packages, in fact, make it your headquarters.

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WOMEN'S AUXILIARY NEWS

Dr. Herbert K. Abrams of the Miller County Public Health Service was the chief speaker at the public relations meeting of Bowie-Miller County Medical Auxiliary, Friday afternoon, at the USO building. Dr. Abrams was introduced to the group by Mrs. L. H. Lanier, who welcomed the guests.

Illustrating his talk with slides, Dr. Abrams gave an instructive talk on vitamins and nutrition and the guarding of the health of children. He particularly stressed the necessity for guarding against tuberculosis and the importance of the care of teeth and eyes.

Miss Mary Lee Taylor also gave a talk on health, representing Dr. Charles Benning of the Bowie County Health Department, who was unable to be present.

Representatives of the Parent-Teacher Associations of the city were among the guests. Cash prizes were awarded to the Grim PTA, Mrs. James Russell president, and to Arkansas Senior High PTA, Mrs. Ed Collins, president, for best attendance at the meeting.

BOOK REVIEWS

The Yearbook of General Surgery, 1942: Edited by Evarts A. Graham, A. B., M. D. Published by the Yearbook Publishers, Incorporated, 304 S. Dearborn Street, Chicago, Illinois.

This edition follows the general plan of the whole Year-

book series. As usual, it constitutes a splendid survey of new work and new ideas throughout the entire field of general surgery. Those unfamiliar with previous editions will find that it covers briefly many interesting points which they have missed in the course of other medical reading. In such a small volume no subject is exhaustively considered but here, for instance, the discussion of penicillin is sufficient to acquaint one with the remarkable possibilities of this new substance and a considerable amount of information is included in six small pages. Chapters on War Surgery and Burns are timely, together, of course, with current references on the proper use of sulfonamides and of plasma in every appropriate condition.

The Yearbook is light medical reading and intensely interesting. The subject-matter changes quickly from page to page. It is not a reference work but is a valuable means of bringing one's general surgical knowledge up to date.

Psychosomatic Medicine. By Edward Weis, M. D., Professor of Clinical Medicine, Temple University Medical School, Philadelphia, Penn., and O. Spurgeon English, M. D., Professor of Psychiatry, Temple University Medical School, Philadelphia, Penn. Pp. 687. Philadelphia: W. B. Saunders Company, 1943.

This book is a 1943 publication of 687 pages. It is the collaboration of a clinician and a psychiatrist and is splendidly written. The subject matter is well arranged and case histories are given illustrating each subject discussed. This gives added interest to the reader. The authors bring out well the inter-relationship between general medicine, neurology, and psychiatry, as well as the other specialties. There is a chapter on military medicine which is a valuable adjunct to this work.

This volume should be in the library of every physician, regardless of his specialty. It is something new and will be most useful to those who possess it.

Keep 'Em Flying

Keep 'Em Floating

Keep 'Em Rolling!



BUY WAR BONDS AND STAMPS

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THE ETIOLOGY AND TREATMENT OF TRAUMATIC OR SECONDARY SHOCK *

C. M. WILHELMJ, M. D.

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Creighton University School of Medicine
Omaha

The term "shock" is rather loosely used in medicine. We speak of hemorrhagic shock, wound shock, surgical shock, anesthetic shock and other forms. The condition that I am speaking of today is a well-defined entity and is characterized by the following findings: Low blood pressure, rapid heart, weak pulse, rapid shallow respiration, marked sweating, fall in body temperature, pallor, cyanosis and apathy. Low blood pressure is really the cardinal feature, and the entire syndrome is dependent upon the excessive lowering of the blood pressure.

This condition may be brought about in a variety of ways. It may occur after rather widespread crushing or tearing wounds, after prolonged manipulation of the abdominal viscera, or following widespread burns. It may also occur following certain acute abdominal conditions such as perforation of a viscus or intestinal obstruction with strangulation. A similar condition also develops in the terminal stages of adrenal insufficiency.

First, I wish to briefly discuss the condition of shock which may follow a widespread crushing or tearing injury. This condition is usually spoken of as traumatic, wound, surgical, or secondary shock. It may occur even when there has been relatively little hemorrhage. Of all the names used to describe this condition that of **secondary shock** is probably the most suitable. Following a widespread crushing injury, the individual usually loses consciousness and examination will often reveal low blood pressure and a rather slow heart. This is spoken of as the stage of **primary shock**. It is due to slowing of the heart and lowering of blood pressure which is

brought about by depressor nerve impulses arising from the injured area as well as by pain and the fear usually experienced by the patient. It is very similar to fainting; and although cases have been reported in which death has occurred from primary shock, recovery is the rule.

After the patient has recovered from the primary shock, there is usually a period of several hours during which the condition may appear fairly satisfactory. Rather gradually, however, the blood pressure begins to fall and coincidental with the lowering of the blood pressure the other symptoms of **secondary shock** develop. When secondary shock has become fully developed and if the blood pressure has fallen to the shock level (50-60 m.m.), no treatment will bring about recovery. The important feature of treatment is prevention.

A tremendous amount of experimental work has been done of this condition. Under anesthetic, the limb of an animal may be severely traumatized or the abdomen may be opened and the intestines subjected to rough manipulation. After a lapse of several hours secondary shock may develop. Experimental studies have shown that while secondary shock may develop without external hemorrhage, hemorrhage always predisposes to the condition. It has been found that all anesthetics predispose to shock although there is a great difference with different types of anesthetics. Ether and chloroform are, in general, the worst while sodium amytal and nitrous oxide are much less apt to accelerate the condition. Another interesting feature agreed to by almost all experimental workers is the fact that if the crushed limb is amputated shortly after excessive trauma shock will not develop. In an animal or human showing fully developed traumatic shock there are certain characteristic physical and chemical changes in the blood. These are as follows:

1. Decrease in total blood volume even when external hemorrhage has not occurred.
2. Decrease in plasma volume which results in marked concentration of the blood.
3. Increase in potassium.
4. Decrease in sodium.

* Read before the Sixty-seventh Annual Session, Arkansas Medical Society, Hot Springs National Park, April 28, 1942.
† C. M. Wilhelmj, M. D.

5. Increase in the specific gravity of the blood.

The etiology of this condition is still in doubt. Professor Walter Cannon of the Harvard University School of Medicine, who was a member of the Committee on Shock appointed to study the condition during the first World War, showed that shock could be produced even when the injured limb was totally denervated before being traumatized. He also showed that occlusion of the circulation would prevent shock but that it would appear when the circulation was again established. On the basis of these and other facts, Cannon postulated his famous theory which stated that histamine or histamine-like substances are produced in the injured similar to histamine shock. According to the Cannon theory, the capillaries all over the body were widely dilated and highly permeable so that the blood plasma oozes out of the capillaries into the tissue spaces. This loss of plasma results in a decrease of total blood volume and concentration of the blood. The decrease in total blood volume on this basis would be the primary cause of the low blood pressure. More recent work has failed to substantiate many of the original ideas in Cannon's theory. Several careful workers have been unable to demonstrate any increase in the amount of histamine or other depressor substances in the blood coming from traumatized limbs; and still others believe that nerve impulses from the injured area may play a rather important role. Still another group of workers believe that the loss of plasma is not general in all tissues of the body but is limited entirely to the traumatized area. In general our ideas as to the etiology of this condition are still unsatisfactory and incomplete. However, there is no disagreement about the fact that the excessively low blood pressure is the fundamental cause of the whole syndrome.

It was previously stated that when secondary shock has become fully developed all treatment is usually valueless. From the practical standpoint, therefore, it is important to be able to diagnose **impending shock** and institute vigorous treatment at that time. During the first World War, Norman Keith, now of the Mayo Clinic, showed that the degree of shock could be diagnosed by determination of the total blood volume and by use of the hematocrit. By means of the hematocrit the percent of red blood cells and plasma and hence the degree of plasma loss can be determined. While the hematocrit is reasonably satisfactory, it is often not delicate enough to detect the very early stages and may

also be influenced by other factors which tend to obscure the true degree of plasma loss. Scudder has pointed out that the determination of the specific gravity of the blood is a very satisfactory and delicate method of diagnosis. The method described by Scudder is quite simple and requires only a few minutes to perform. The normal values for the specific gravity are: 1.0566 for men; and 1.0533 for women. Since the determination requires only a drop of blood, it can be done at frequent intervals on any patient who has sustained the type of injury that might lead to shock. As soon as the values begin to show progressive increase the patient can be considered in the stage of impending shock, and if proper treatment is instituted at this early stage it may be possible to prevent the development of the fully developed fatal condition.

Treatment

Since the whole symptom complex of traumatic shock is due fundamentally to the loss of blood plasma, treatment should be directed toward accomplishing two things:

1. To replace the lost plasma.
2. To stop further loss.

It is important to remember that the blood is actually concentrated; that is, the number of red blood cells per unit volume of blood is definitely in excess of normal while the plasma is correspondingly decreased. From this, it is obvious that the ideal treatment aims to replace the lost plasma. Transfusion with whole blood while not contraindicated is certainly not the ideal form of treatment. Red blood cells are not needed; plasma is. Transfusion with plasma in amounts sufficient to restore that which has been lost by oozing through the dilated capillaries accomplishes the first aim of treatment. While normal plasma may be used, a still better method of treatment is the use of concentrated plasma. This can be done by using dried plasma and making up the solid portion to less than the original volume. The concentrated plasma in virtue of its high osmotic pressure tends not only to prevent further loss but also to draw lost plasma from the tissue spaces back into the capillaries. The use of normal saline to restore lost plasma volume constitutes a very unsatisfactory method of treatment because the saline passes readily from the capillaries into the tissue spaces. It will, therefore, not restore the lost plasma volume and due to its rapid passage into the tissue spaces may actually result in edema of the liver, lungs, heart and other tissues which may be detrimental to the patient.

During the last World War, a 7 percent solution of gum acacia was rather widely used when blood was not available. However, with the present methods of processing (drying) blood plasma, the use of gum acacia or other foreign substances should be considered only when blood plasma is not available.

If sufficient plasma is given, the plasma and total blood volume may be restored to normal, but unless something is done to correct the underlying condition even the added plasma may soon be lost into the tissue spaces. In other words, unless the leak is stopped plasma transfusions may be without effect. Up until quite recently we were without any method of stopping the loss. However, it now appears that the use of extracts from the cortex of the adrenal glands may in many cases prevent the further loss of blood plasma. The theoretical basis for the use of cortical extract is rather interesting, and it may be well to consider it for just a moment. Experimental workers have found that when the cortex of the adrenal glands have been removed from animals the animal gradually passes into a shock-like condition in which the physical and chemical changes in the blood as well as the general clinical picture are identical with those of traumatic shock. The administration of cortical extract may restore the animal to normal. Further work has shown that in animals dying from traumatic shock, and extensive burns, hemorrhages and degenerative changes are often found in the cortex of the adrenal glands thus suggesting that the cortex has become functionally impaired. The recent work of Scudder and others has shown that the use of cortical extract when started early may prevent the development of shock. I think it is important to emphasize at this point that the use of adrenalin is probably contraindicated. In traumatic shock there is widespread and marked vasoconstriction and capillary dilation. The administration of adrenalin will not increase the vasoconstriction nor does it result in constriction of the capillaries.

Shock Following Burns

Following extensive burns the victim may pass into a condition clinically identical with traumatic shock. The physical and chemical changes in the blood are also identical. I previously called attention to the fact that experimental workers have been unable to find any increase in the amount of histamine in the blood in traumatic shock. Following extensive burns, however, there is a great increase in the amount of histamine in the circulating blood. The treatment

of the general shock-like condition in burns is in general the same as in traumatic shock. It is again important to emphasize that the giving of large amounts of saline or glucose in an attempt to compensate for the loss of blood plasma is definitely contraindicated. If large amounts are given it may escape into the tissues, and it has been shown that the resulting edema of the lungs may be so marked that the patient may actually be drowned by this procedure. Because of the increased amount of histamine in the blood following extensive burns, several investigators have advocated the use of histaminase to destroy the histamine. One of my colleagues, Dr. Nicholas Dietz, has had the opportunity of trying this mode of treatment both clinically and experimentally and his results indicate that with the present preparations of histaminase the treatment is practically useless.

Hemorrhage

It was previously mentioned that hemorrhage definitely predisposes to traumatic shock, and it is also well known that excessive untreated hemorrhage may result in a shock-like condition sometimes difficult to tell from true traumatic shock. However, determination of the specific gravity of the blood following uncomplicated hemorrhage shows that the blood actually becomes more dilute, that is, the specific gravity decreases. This is due to the fact that in hemorrhagic shock fluid passes from the tissue spaces back into the blood stream and thus partially compensates for the loss of blood volume. From this it is seen that the fundamental cause of hemorrhage shock is definitely different from true traumatic shock. You are all aware of the fact that the specific treatment for hemorrhagic shock is to stop the hemorrhage and restore the blood volume by transfusion of whole blood. It is important to emphasize, however, that if following hemorrhage the blood pressure has remained low over a period of several hours the anoxia of the tissues and also of the capillaries may produce irreversible damage. As a result of this irreversible damage, the capillaries often dilate and become excessively permeable so that a condition somewhat similar to traumatic shock results and blood plasma may escape into the tissues much as it does in traumatic shock. This emphasizes the importance of early transfusion in hemorrhage in order to prevent irreversible damage from anoxia. At this point it might be interesting to call attention to the fact that following hemorrhage the blood pressure is a very poor index of impending hemorrhagic shock. All of the compensatory meas-

ures of the body are acting to maintain blood pressure at an approximately normal level and as Blaylock has recently shown the subject may be actually tottering on the verge of fatal hemorrhagic shock but the blood pressure may show little indication of the severity of his condition. The heart rate, however, will be found elevated. Blaylock has emphasized that following excessive hemorrhage the heart rate should be repeatedly checked and that a persistent elevation of heart rate is indicative of impending hemorrhagic shock regardless of what the blood pressure readings may show. If treatment by adequate transfusion is instituted, hemorrhagic shock may be averted. It is again important to emphasize that the administration of adrenalin in hemorrhagic shock is contraindicated. The adrenal glands are actually being stimulated and adrenalin is being discharged in excessive quantities. Additional amounts will at the best do no good and may actually be harmful.

Intestinal Obstruction

Following intestinal obstruction where strangulation of the bowel has occurred, a shock-like condition develops which is similar in many respects to that seen in traumatic shock. The loss of plasma is apparently in and from the strangulated bowel. In addition to the usual surgical treatment for strangulation it may be necessary to institute the previously mentioned treatments for shock.

In closing I wish to call your attention to a rather interesting type of shock which in most respects is identical to traumatic shock. It is the shock which may follow application of a tourniquet to a limb. Using dogs it has been shown that if a tourniquet is placed on a limb tight enough to occlude the arterial circulation a typical shock-like condition may develop **when the tourniquet is removed**. If the tourniquet is left on for six hours, fatal shock will always develop. For periods less than six hours the development of shock is roughly proportionate to the time factor. The etiology of the shock-like condition resulting from this procedure is clear. During the prolonged period of anoxia the tissue below the tourniquet including the capillaries are severely damaged and the cells may actually die. When the blood is allowed to return to this limb, the capillaries are widely dilated and highly permeable and blood plasma leaks out into the tissues in such great quantities that shock results. There is no evidence that histamine or histamine-like substances play any role. The loss of plasma is entirely in the

devitalized tissues. Amputation of the limb before releasing the tourniquet will prevent the condition. Production of shock in this way is probably only of academic interest, but it does emphasize that it may be very dangerous to leave a tight tourniquet on a limb without frequently releasing it in order to prevent severe anoxia of the tissues.

CLINICAL EVALUATION OF "SECONAL SODIUM"

During the course of a year, Dietrich (Anesth. & Analg., 22:28, 1943) attempted to evaluate "Seconal Sodium" (Sodium Propyl-methyl-carbonyl Allyl Barbiturate, Lilly) as a sedative in general pediatric practice. Over 3,700 doses of the drug were administered to more than 500 children and infants, both private and ward patients, without any untoward effects on pulse, temperature, blood pressure, or cerebrospinal fluid pressure. The drug proved to be an excellent general sedative possessed of some analgesic action, and in tetanus and in the performance of certain otherwise painful procedures where a general anesthetic was not desirable, such as pinch grafts, lumbar punctures, myringotomies, and incision and drainage of minor abscesses, it was of particular value.

When the age of the patient and freedom from gastric symptoms permit, "Seconal Sodium" should be given by mouth. When administered by rectum, however, its action is only slightly retarded. The intact capsule may be inserted in the manner of a suppository by first pricking each end of the capsule with a pin; or, where fractional doses are desired, the powder may be suspended in tap water and given by rectum with a small syringe.

Dietrich found that for good sedation in children of average nutrition the following doses were appropriate: 1-3 months, $\frac{1}{4}$ - $\frac{1}{2}$ gr. by rectum; 3-6 months, $\frac{1}{2}$ - $\frac{3}{4}$ gr. by rectum; 6-36 months, $\frac{3}{4}$ -1 gr. by rectum; 3-8 years, $\frac{3}{4}$ gr. by mouth or $\frac{3}{4}$ - $1\frac{1}{2}$ grs. by rectum; 8-15 years, $\frac{3}{4}$ - $1\frac{1}{2}$ grs. by mouth or 1 - $1\frac{1}{2}$ grs. by rectum. For very deep sedation or for light analgesia some increase in dose may be necessary. Any dose in this schedule may be repeated safely once within an hour if the desired result is not obtained, or may be given with impunity every 34 hours if circumstances demand prolonged sedation.

TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

THE intensification of "early diagnosis" campaigns and the widespread use of mass X-raying in war industry and armed service can result only in the discovery of more and more tuberculosis among the apparently healthy. It is obvious that a large proportion of these cases will be preclinical, in the old meaning of the term. Today we must modify our terminology to acknowledge that tuberculosis found early deserves and demands early treatment. Finding the disease in a stage devoid of symptoms imposes on us the obligation so to appraise cases and so to select treatment that development of symptoms will not occur and spread of tuberculosis will be prevented.

PNEUMOTHORAX IN THE TREATMENT OF ACUTE MINIMAL TUBERCULOSIS

In its most characteristic connotation, the term acute minimal tuberculosis implies a recent, or relatively recent small area of pulmonary infiltration without cavitation. This lesion is most often found beneath the clavicle or in the first or second anterior interspace and is described by the roentgenologist as "soft."

Typically, we might expect the patient to be a healthy-appearing adolescent or young adult who has been in direct contact with a case of active tuberculosis. Cough, sputum, hemoptysis or other classical symptoms have usually not appeared. Constitutional symptoms are absent or are limited to malaise, anorexia or slight weight loss. Careful physical examination of the chest is usually negative. The Mantoux test is positive, while the sputum or gastric contents may or may not be positive.

Although the foregoing might be described as "typical," each individual case represents a problem for the physician to solve, not only on the basis of his experience in the usual methods of treatment, but also on his knowledge of the social background, economic status and psychological make-up of his patient. Such important considerations as age, sex, race, occupation, co-existing diseases and length of exposure to tuberculosis must be carefully weighed.

To obtain this information, a period of observation at basal conditions, i.e., absolute bed rest, is essential. Whenever possible this period should be spent in a hospital for the tuberculous, away from the distracting influences of the

family. This period should be measured in terms of weeks rather than months.

Occasionally, a lesion which roentgenologically seems entirely typical, will clear in the space of two or three weeks, indicating a mistaken diagnosis.

The acute early infiltrate is always an unstable lesion, it soon regresses or progresses. Absorption or fibrosis may follow; or there may be rapid or slow progression with caseation, liquefaction and excavation.

The indications for pneumothorax are numerous but, in the opinion of the author, the following are the most important. The production of positive sputum indicates that tissue necrosis has already occurred, and for this reason, these cases should be given pneumothorax promptly. Likewise, lesions with X-ray evidence of beginning breakdown should be collapsed immediately.

If the lesion continues to progress on bed rest, immediate collapse is indicated, even though the sputum remains negative. In addition to serial X-rays; careful pulse, temperature and respiration records, sedimentation index and differential white count are valuable indices of the patient's course under therapy.

There are supplementary, more personal indications for pneumothorax which have not been mentioned so prominently in the literature. The family wage-earner may prefer immediate collapse and the attendant shorter period of hospitalization and disability to the more conserva-

tive, if equally effective, period of absolute bed rest.

Likewise, the non-cooperative, the unintelligent, or the trouble-making patient may be much better controlled by pneumothorax. In the experience of the author the most difficult patient to handle in the sanatorium is the apparently healthy individual with no symptoms. He finds it boring to maintain himself at bed rest and all too frequently leaves the hospital against medical advice. Many times pneumothorax has been instituted because it seemed the only way to control both the patient and his lesion.

The adolescent girl with minimal tuberculosis requires especially close observation, and if there is any question as to lack of satisfactory progress, pneumothorax should be done.

Others have listed as advantages of pneumothorax in these cases, the shorter period of hospitalization and disability, the shorter conversion time in case the sputum is positive and the fact that, in their opinion, the end results are better. It should also be emphasized that the doctor sees his pneumothorax cases oftener and any change will be detected sooner. He is likewise in a better position to regulate their social and vocational activities.

The chief arguments against pneumothorax are: the inconvenience to the patient, the necessity for the long and expensive period of treatment and, most important, the danger of complications. While the latter are rare in minimal cases, pleural effusions, empyema, spontaneous pneumothorax, bronchopleural fistula and non-expansile lung do occur.

SUMMARY

There is no such thing as a "routine" treatment for minimal tuberculosis. It is equally absurd to say that every case should receive pneumothorax as it is to say that collapse should never be used until the disease becomes moderately or far advanced.

Beginning tissue necrosis, positive sputum and lesions which are progressive on absolute bed rest are, in the opinion of the author, absolute indications for pneumothorax.

Once a small area of pulmonary infiltration has been definitely diagnosed as being tuberculous, the patient should be treated for **tuberculosis**, and not for a "spot on the lung." There are too many patients with "spots on the lung" who only discover that they have tuberculosis when referred to a specialist after their disease has progressed beyond the minimal stage.

If the "early diagnosis" campaign is justified as it most assuredly is, then an "early and adequate treatment" campaign is likewise indicated.

The adequate treatment of acute minimal tuberculosis does not consist in merely telling the patient to "take it easy." It demands a period of absolute inactivity supplemented by pneumothorax or other collapse procedure as deemed advisable by the attending physician.

Pneumothorax in the Treatment of Acute Minimal Tuberculosis, Edwin G. Kirby, M. D., Tuberculosis Supplement to California and Western Medicine, July, 1942.

March 28th. This day dining on chicken livers en brochette and we'll bet Jim Amis would give up a week's swimming on a certain Pacific beach for the dish.

COMMUNIQUE

April 12, 1943.

To the Editor:

Received my April Journal this morning which reminds me to remind you to change my address as per below.

I was much interested in the program of the forthcoming annual meeting and regret very much that I cannot be there as this is the first meeting I will have missed since 1930 and the second since 1923.

Give my regards to the faithful. I sincerely hope that I may be there for the next meeting but as you can judge from the address that is only wishful thinking.

Sincerely,

R. J. Calcote, Comdr., U. S. N. R.,
U. S. Naval Mobile Hospital No. 4,
Fleet Postoffice,
San Francisco, California.

DURING FOOD SHORTAGE

It is well to bear in mind that **dried brewer's yeast, weight for weight, is the richest food source of the Vitamin B Complex.** For example, as little as one level teaspoonful (2.5 Gm.) Mead's Brewers' Yeast Powder supplies: 45 percent of the average adult daily thiamine allowance, 8 percent of the average adult daily riboflavin allowance, 10 percent of the average adult daily niacin allowance.

This is in addition to the other factors that occur naturally in yeast such as pyrodoxin, pantothenic acid, etc.

Send for tested wartime recipes, the flavors of which are not affected by the inclusion of Mead's Brewers' Yeast Powder. Mead Johnson & Company, Evansville, Ind., U. S. A.

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EDITORIALS

THE ANNUAL SESSION

The stream-lined 1943 annual session in Little Rock, April 19th-20th, was exceptionally well-attended by members and visitors. The scientific presentations and exhibits were most interesting and educational. The commercial exhibitors were but a few less than in normal years and expressed themselves as well pleased with their participation. The guest speakers, R. L. Sanders, of Memphis, and John H. Musser, of New Orleans, were well chosen and contributed much to the success of the meeting. The memorial session was held at 11:30 on the morning of the second day, a desirable innovation, which promoted the attendance of the membership. In the business sessions, the Society approved of the appointment of the Tuberculosis Advisory Board by the Governor and suggested the appointment of a medical advisory board to advise with the Governor and the heads of the state charitable agencies when medical interests were involved. The new state hospital admission law was approved. It was suggested that students in state-supported schools should present a com-

petent certificate showing absence of communicable and infectious disease prior to their entrance. Routine serological tests of all pregnant women were advised. The following officers were elected: President-Elect, Jos. F. Shuffield, Little Rock; First Vice-President, Bryce Cummins, Little Rock; Second Vice-President, J. C. Land, Walnut Ridge; Third Vice-President, B. L. Moore, El Dorado; Treasurer, Paul L. Mahoney, Little Rock; Secretary, W. R. Brooksher, Fort Smith; Delegate to the American Medical Association, W. R. Brooksher; Alternate to the American Medical Association, R. B. Robins, Camden; Councilors, First District, P. W. Lutterloh, Jonesboro; Third District, J. O. Rush, Forrest City; Fifth District, S. A. Thompson, Camden; Seventh District, H. King Wade, Hot Springs National Park; Eighth District, M. J. Kilbury, Little Rock, and Ninth District, J. G. Gladden, Harrison. In the reorganization meeting of the Council, Clyde McNeil, Rogers, was re-elected Chairman. The 1945 session will be held in Little Rock.

EDITORIAL COMMENT

HISTORY OF THE ARKANSAS MEDICAL SOCIETY

The History of the Arkansas Medical Society, prepared by the Society's Committee, has been printed and was placed on sale at the Little Rock meeting. Those who did not obtain copies there may write the state secretary inclosing fifty cents for each copy desired. The History is printed in an attractive form and will be a source of reference to all members.

FREEDOM ESSENTIAL

"No greater task has ever confronted the physicians of America than the part they will be asked to play in the planning of medical services for the postwar world. They will meet that obligation as they have met every other call placed on them in the past—voluntarily—bound only by the traditions of their great profession, uncompelled by any arbitrary mechanism such as that founded by totalitarian governments to enslave both their people and the physicians who served them."

—Morris Fishbein, M. D.

PROCEEDINGS OF SOCIETIES

The Pulaski County Medical Society was addressed April 5th by Maj. W. A. Staggs, "Orchidopexy in Adults"; Capt. F. B. Davies, "Non-pneumococcic Pneumonias"; Maj. Jos. W. White, "Indications for Radical Technique in Breast Surgery," and Capt. E. H. Trowbridge, Jr., and Maj. Ralph E. Ellis, "Vascular Anomalies Involving the Nervous System," all speakers from Camp Jos. T. Robinson.

Elizabeth D. Fletcher, Secretary.

The Craighead-Poinsett County Medical Society met in dinner session at Jonesboro April 1st for the following program: "University of Arkansas School of Medicine and Hospital," Byron L. Robinson, Little Rock; "Blass Blood Bank," Paul C. Eschweiler, Little Rock, and "Vinethene Anesthesia," Mr. S. A. Gaffney.

J. H. McCurry, Secretary.

The motion picture, "Peptic Ulcer," was presented to the meeting of the Miller County Medical Society in Texarkana April 16th.

H. K. Abrams, Secretary.

The Sebastian County Medical Society was addressed April 13th by W. F. Adams, "Toxemias of Pregnancy."

COMMUNIQUE

April 16, 1943.

To the Editor:

On returning to this station last month, I found my receipted membership card from the State Medical Society for the year 1943 which I appreciate very much. This is a very nice thing for the State Medical Society to do for the men in the service.

I left the New Castle Army Air Base last November and went to Randolph Field to attend the Flight Surgeon's School. After finishing there, I went to Nashville, Tennessee, for six weeks, and from there to Morrison Field, Florida, for three weeks. I was then transferred back up here and assigned as Flight Surgeon and also Chief of Ear, Nose and Throat Service. However, the best thing I found on returning was that I had been promoted to Captain.

See you when the war is over!

Best regards,

John W. Smith,
Captain, M. C.

PERSONALS AND NEWS ITEMS

BORN—To Dr. and Mrs. L. G. Fincher, El Dorado, a daughter, on March 19th.

Capt. T. K. Mahan, Blytheville, has been transferred to the Hoff General Hospital, Santa Barbara, California.

B. E. Barlow has been elected a director of the Dermott Rotary Club.

Jeff Baggett, Prairie Grove, has been appointed Lieutenant, Medical Corps, Army of the United States, and assigned to Carlisle Barracks, Pennsylvania.

BORN—To Lieut. and Mrs. H. King Wade, Jr., Memphis, H. King Wade III.

H. J. Mayfield, El Dorado, has been promoted to Captain, Medical Corps, Army of the United States.

Rozz Bizzell, Little Rock, has been promoted to Captain, Medical Corps, Army of the United States. Capt. Bizzell is now stationed with a Bombardment Squadron overseas.

Sam Phillips, Little Rock, has been appointed Major, Medical Corps, Army of the United States, and assigned to Army and Navy General Hospital, Hot Springs National Park.

BORN—On March 12th, a daughter, Susan Elizabeth, to Capt. and Mrs. V. O. Lesh, Fayetteville.

The following attended the New Orleans Graduate Assembly, March 15-18th: W. L. Boswell, Clarendon; A. D. Cathey, El Dorado; A. W. Cox, Helena; M. L. Dalton, Brinkley; C. W. Dixon, Gould; H. W. Hundling, Little Rock; C. E. Kennedy, Smackover; M. J. Kilbury, Little Rock; R. R. Kirkpatrick, Texarkana; J. A. Moore, El Dorado; H. E. Murry, Texarkana; P. H. Muse, Junction City; W. V. Newman, Little Rock; G. W. Parson, Texarkana; V. L. Payne, Pine Bluff; B. D. Poole, El Dorado; M. D. Prickett, Malvern; C. C. Reed, Jr., Little Rock; M. V. Russell, El Dorado; H. H. Smith, Fort Smith; W. Decker Smith, Texarkana, and Joe Verser, Harrisburg.

John R. Samuel, Little Rock, now on duty overseas, has been promoted to lieutenant-colonel.

The March, 1943, issue of the Tri-State Medical Journal contains "The Place of Health Resort Therapy in the Treatment of Conditions Affecting the General Nervous System," by Geo. B. Fletcher, Hot Springs National Park, and "The Value of X-ray in Obstetrics," D. E. White, El Dorado.

Comdr. C. M. Wassell, Little Rock, recently addressed the Hawaii Medical Association.

W. C. Overstreet, R. H. Willett and P. W. Lutterloh recently addressed public meetings in the interest of the blood plasma campaign in Jonesboro.

J. K. Jones, Lepanto, attended the New Orleans Postgraduate Medical Assembly in March.

Capt. Louis S. Dunaway, Conway, is now on duty with the 94th Station Hospital overseas.

Major S. S. Kirkland recently visited his father, S. D. Kirkland, Van Buren, en route to Camp Barkeley after completing a special course in orthopedic surgery at Columbia University, New York.

Lt. (j. g.) John W. Harper, M. C., U. S. N. R., El Dorado, is now on duty at Camp LeJeune, North Carolina.

Capt. O. B. Barger has been transferred for duty with the 703rd Military Police Battalion at Fort Myer, Virginia.

The following attended the American College of Surgeons session at Memphis during March: Jos. F. Shuffield, J. Harry Hayes, J. Donald Hayes, Carl A. Rosenbaum, John R. Parsons, Little Rock; M. B. Crow, Warren; E. E. Barlow, Dermott; L. J. Kosminsky, Texarkana; R. B. Robins, Camden; B. M. Stevenson, West Memphis; L. C. McVay, Marion; J. K. Burge, Lake Village; S. A. Drennen, Stuttgart; I. F. Jones, S. J. Wolferman, Fort Smith.

The April, 1943, Tri-State Medical Journal was a Texarkana hospital edition with the following articles: "Peritendinitis Calcarea," C. H. Frank; "Hydatidiform Mole," C. A. Smith; "The Significance of Discharge from the Nonlactating Breast," L. P. Good, and "Roentgenology as an Aid in the Diagnosis of Mitral Stenosis," G. W. Parson.

T. K. Mahan, Blytheville, has been promoted to Captain, Medical Corps, Army of the United States.

E. L. Dunaway, Conway, now stationed at Stringtown, Oklahoma, has been promoted to Captain, Medical Corps, Army of the United States.

A. A. Blair, Fort Smith, addressed the recent regional meeting of the American College of Physicians at New Orleans on "Problems Presented by Patients with Coronary Disease."

Capt. Thos. H. Jones, Waldo, has been transferred from Camp Van Dorn, Mississippi, to La Garde General Hospital, New Orleans.

R. B. Robins has been elected alderman at Camden.

F. Q. Wyatt has resumed practice at Batesville.

Dr. and Mrs. Chas. T. Chamberlain, Fort Smith, spent an April vacation in Mississippi.

R. M. Blakely has been elected secretary of the Little Rock School Board.

John W. Smith, Little Rock, now on duty as Flight Surgeon, 2nd Ferrying Group, New Castle Army Air Base, Wilmington, Delaware, has been promoted to Captain.

Lt. (jg) James F. Lewis, Fayetteville, is now on duty overseas with a Marine Division.

Maj. Ellery C. Gay, Little Rock, is now stationed overseas.

L. T. Evans and Paul Gray were recently elected president and director, respectively, of the Batesville Rotary Club.

J. D. Riley, State Sanatorium, recently addressed the Hot Springs Rotary Club.

Dollie Morgans, Little Rock, has been commissioned in the medical section, Woman's Auxiliary Army Corps.

S. J. Wolferman, Fort Smith, has been elected president of the Sebastian County Tuberculosis Association.

Frank Murphy has moved from Lexa to Brinkley.

Dr. and Mrs. S. N. Doane, Arkadelphia, recently visited in Tennessee and attended the graduation of their son, Sam, Jr., at Vanderbilt University.

J. D. Johnson, Fort Smith, now stationed at Fort Snelling, has been promoted to major.

James F. Lewis, Fayetteville, now on duty with the Naval Medical Corps, has passed his examinations as a diplomate of the American Board of Internal Medicine.

R. J. Calcote, Comdr., Naval Medical Corps, Little Rock, is now serving overseas.

G. R. Siegel, Clarksville, has been elected secretary of the Lions Club.

A. A. Blair has been elected school director at Fort Smith.

Capt. W. L. Shippey, Fort Smith, is now stationed overseas.

Jos. F. Shuffield, Little Rock, has been re-appointed to the State Board of Nursing Examiners.

CRITICAL TIMES IN BOONEVILLE *

January 11, 1943.

Dear Mr. Fisherman:

The sun is shining bright. The atmosphere is clear and there is no wind. A telepathic message from Mr. B. M. (big mouth) Bass and Mrs. S. M. Bass of Nimrod Dam, upper stretch, near Rover, Arkansas, was received by me this morning and registered so strongly that it was with great difficulty that I kept myself in the office to do the necessary work. At noon I went out and looked at my boat. It seemed to me that I could hear it beg to get into the water. It wants to get the dry surfaces wet. On coming back to the office I looked at the Sea Horse. It was cavorting around and whinneying all over the room, crying to be taken to the creek and given some exercise. I am seriously afraid that all my fishing gadgets are going to get impatient with me and take out of their own accord to try to have some fun if this weather keeps up. Even

my wooden minnows are wagging their tails at me.

So the first Sunday you feel like you would like to get out and wet a line, give me a ring. All you need to bring is your fishing tackle. And if you feel like stealing out of your office under a disguise to keep people from asking embarrassing questions, it is very likely that I would have a trip to make in the far country about some Thursday, having to leave here about 10:30 or 11, and it might take me so long to make it that I would not get back before dark. It might be possible that someone in the neighborhood of Fourche would be in mighty bad shape, have tonsilitis or diphtheria or something which would demand looking at their throats, and their names might be Bass or some of their kinfolks. Anyway, this is your invitation. Ask me at any time and I will strive my darndest to give satisfactory service.

Very truly yours,

S. P. McConnell.

OBITUARY

FLEM D. SMITH, age 62, died at his home in Blytheville March 27th. Born at Viola he attended the Salem High School and college in Little Rock and graduated from Memphis Hospital Medical College in 1911. He first located for practice in Alicia but had been in Blytheville for over 25 years. For twenty years he served as secretary of the Mississippi County Medical Society, had been a member of the State Medical Board of the Arkansas Medical Society and served two terms as councilor from the first district in the Arkansas Medical Society. He was a fellow of the American Medical Association. At one time he was health officer for Blytheville and for Mississippi county. Surviving relatives are his wife, a son and a daughter.

ARTHUR LEE GOATCHER, age 71, Plumerville, died February 25 after a prolonged illness. Born in Sharp county, March 4, 1872, he graduated from the University of Nashville Medical Department in 1902 and had practiced in Plumerville for 42 years. For more than 40 years he had taught in the Plumerville Baptist Church Sunday School where he was also a deacon and active worker. Surviving relatives are his wife, four brothers and one sister.

* A true copy of a communication not addressed to the editor but obtained for publication in order that our readers may know the difficulties of medical practice in this area.

RANDOM THOUGHTS OF THE SECRETARY

March 28th. This day dining on chicken livers en brochette and we'll bet Jim Amis would give up a week's swimming on a certain Pacific beach for the dish.

April 1st. On this particular day making an official visit with Councilor McNeil to Madison County and find the Councilor none too familiar with the highways in his district. Huntsville is having a busy day and so do we. Returning, we stop to visit with N. J. Hill at Hindsville, regrettably ill at home, counting this and the visit with Counts, each as serene as the valleys and mountains of this section in the consciousness of good labors for the health and welfare of their people.

April 6th. Gathering in Grayson's office this afternoon after another experience in traveling, Booneville to Little Rock, on the Rock Island, the diner having been left out west and none aboard getting breakfast—so what? The former difficulties of the program for medical and hospital care of the wives and children of enlisted men come in for full discussion, if not for final conclusions. John Dudley finds us a extra special steak tonight and the inner man is pleased over the entire day, including a pleasant trip homeward on the Rocket.

April 18th. En route Little Rock this morning seeing soldiers all along the railroad right-of-way, the significance of which begins to dawn upon us, and is confirmed as we take the siding at Gleason for the presidential special. Locating at the Marion where employees do everything to get us started and there is nothing of trouble. Carl Rosenbaum busy procuring needed equipment moves us to special thanks. To past-president Jones' where we make ourselves one of the younger generation. Thence to the Albert Pike for the president's dinner, doing our Boy Scout deed in loaning N. T. Hollis a nickel when he really needed one. Meeting all of the faithful, and pleased to greet 14 of 17 past-presidents. Comes Dan Autry with whom we had an active association during the summer days of procurement, but who now is enjoying the practice of medicine at an army hospital with relatively few difficulties.

April 19th. A good registration for the opening session is an encouraging sign. As the meeting progresses in the afternoon, helpful Cazort, re-addresses our record chest for which act we must chastize him, all his other activities being well within normal range. The History of the Arkansas Medical Society sells well, Cazort again demonstrating a helpful spirit by buying, at intervals, a total of six copies. The evening public meeting is well attended with no loss of audience from the preceding dinner which surprises Cummins and others. During the evening we meet Spider Rowland, Joe Shuffield's personal publicity agent, whom Bob Robins is now trying to engage for a particular campaign. We think the highlight of the day is the rat which toured the hall during the public meeting, seen by practically no women, thus averting a panic.

April 20th. With proper timing the morning session is concluded and ample opportunity is afforded for the memorial session, held at a new time this year, with far better attendance than previously. Some slight parliamentary difficulty is encountered in the afternoon business session, not unexpected by the President, who had studied well his Rules of Order, and with the help of Vice-President Drennen, the smooth flow of business is shortly resumed. Electing Grandpappies Thompson and

Wade to the Council after the unanimous selection of Shuffield for President-Elect, the session sits back to hear all the past-presidents, and the 1943 meeting becomes history.

April 21st. Back in what we ordinarily call routine but which seldom approaches that hum-drum existence.

April 22nd. All members present except our sponsor, Harry Savery, today as we discuss the supply of physicians before the Van Buren Rotary Club. Hugh Park, the local editor, tells of Van Buren's latest distinction. It seems that when the presidential train stopped there Sunday, the scottie was allowed off the car, so now a telegraph pole near the tracks bears a sign: "Failla stopped here."

April 24th. Press reports are that the hyphenated-Americans at Jerome are to be taught the latest dance steps. We are willing to be fair and grant that these are American citizens but we cannot forget that is their hyphenated background which executed American fliers this week and we want to know if American citizens in Manila are getting dancing lessons.

SELECTIVE SERVICE

To the Editor:

As you know, the demands on the medical profession are unbelievably great and the number of doctors entering the military service very large. Since Pearl Harbor the quotas have been increasingly large, thus the number of men to be examined each month is in proportion. Under the circumstances it is impossible for the examining physicians of Selective Service to carry out the complete physical examination on all registrants.

Medical Circular No. 3 sets forth the reasons for the adoption of the system employed; it also covers the Selective Service Regulations and the List of Manifestly Disqualifying Defects, Deficiencies, Disorders and Diseases.

Selective Service is much impressed with the devotion and the patriotism of its examining physicians and dentists. As you no doubt know these professional men in Selective Service are making the preliminary examination of registrants who are to be inducted into all branches of the military service. This represents a national service of great magnitude and importance.

Publication of this circular, or portions thereof, together with an editorial on the value of the service and appreciation of the work of the medical profession, might be very worthwhile.

For the Director,

(Signed) L. G. Rowntree,
(Colonel, Med.-Res.)
Chief, Medical Division.

WOMAN'S AUXILIARY PAGE

MRS. RALPH CROSS, Publicity Secretary, Texarkana

Bowie and Miller Counties Medical Auxiliary met March 26th with Mrs. J. T. Robison, with Mrs. J. H. Rives and Mrs. Roy Baskett co-hostesses.

Spring flowers were used throughout the house.

Mrs. C. H. Frank, president, conducted the business session. Miss Louise Smith, health nurse for Miller county, spoke on "Child Care," giving impressive demonstrations.

The dining table was covered with an Italian cut-work cloth and centered with a silver bowl of peach blossoms.

Mrs. P. H. Phillips poured coffee, and Mrs. Frank served cake. Mrs. Clayton Bailey, of Cape May, N. J., sister of Mrs. Rives, was a guest.

The Woman's Auxiliary to the Pulaski County Medical Society met March 17th, with Mrs. B. A. Rhinehart. Mrs. C. E. Oates, Mrs. J. B. Crawford and Mrs. H. S. Stern served as co-hostesses.

After the plate-luncheon served to the thirty-five members present, the meeting was called to order by Mrs. Carl A. Rosenbaum, president.

Plans were announced for the Auxiliary's participation in the meeting of the Arkansas Medical Society to be held in Little Rock on April 19-20. Mrs. Oscar Gray announced that the Auxiliary will sponsor the program on Cancer Control at the City Federation meeting on March 23rd. Mrs. H. A. Higgins reported the Sewing Committee had, during the last month, repaired 117 garments at Camp Robinson.

The slate of officers for the coming year submitted by the Nominating Committee of the State Auxiliary was read and approved.

The day Wednesday, March 31st, was set aside for city-wide observance of Doctor's Day.

Mrs. R. T. Smith, Program Chairman, presented Mrs. A. F. Pirniquie who performed two piano selections by Chopin.

Mrs. W. R. Brooksher of Fort Smith, state commander of Arkansas for the Women's Field Army for the Control of Cancer, was honored

at a meeting of the Bowie and Miller Medical Auxiliary held at the home of Mrs. William Hibbitts.

Mrs. Brooksher discussed "Answers to the Public's Questions on Cancer" and included in her talk the nature and cause of cancer, the distribution, diagnosis, treatment and prevention of the disease.

Congress and the president have proclaimed April as cancer control month and 11,000 circulars will be distributed over Texarkana and articles will be placed in the daily papers and radio talks made on this subject during the month.

Mrs. P. H. Phillips of Ashdown is Little River County chairman for cancer control and Mrs. Ralph Cross is local chairman.

At the conclusion of the program, members of the medical auxiliary were hostesses at a coffee in Mrs. Brooksher's honor. The home was decorated throughout with spring flowers, including tulips, spirea, pansies and sweet peas, and the dining table was centered with sweet peas.

Coffee was poured by Mrs. L. J. Kosminsky, president-elect of the Arkansas State Medical Auxiliary.

BOOK REVIEWS

The Principles and Practice of War Surgery: By J. Trueta, M. D., Acting Surgeon in Charge, Accident Service, Radcliffe Infirmary, Oxford, England; formerly Director of Surgery, General Hospital of Catalonia, University of Barcelona. Pp. 441. 144 text illustrations. Saint Louis: C. V. Mosby Company, 1943.

This classic on the practice of war surgery deals with the principles of this type of traumatic surgery devised by Winnett Orr and practiced by Trueta during the Spanish Civil War. A short history of the various phases of war surgery throughout the years is given. The physiology and bacteriology of healing and infection are discussed in relation to the basic ideas of prompt surgical treatment, cleansing, excision, drainage and immobilization in plaster. Trueta's work has shown that the results of the treatment of war injuries are in a large degree independent of the surgeon's skill. With treatment which stresses his basic principles, the results are uniformly good. This text should be read by medical officers of the armed forces and by those who treat traumatic cases in civil life.

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THE JOURNAL OF THE ARKANSAS MEDICAL SOCIETY

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COMMUNIQUE

To the Editor: April 7, 1943.

Just a note to let you know that I fell heir to a copy of the March Arkansas Medical Journal and was greatly pleased to see the prepared card in the back of it after having missed it in the February issue.

The whole magazine was good reading and it circulated freely among four of the Arkansas delegation who are in these parts and then among the other officers with our group who likewise enjoyed it.

The changes of address are frequent but I'd like to give you this one at least as a temporary thing: "2nd Aux. Surg. Group, A. P. O. 521, care Postmaster, New York, New York." Will try to keep you advised of additional changes.

We are living in tents, having hot and cold running mirrors and that's all. Believe me, Arkansas was never like this.

Give my regards to all the Arkansas gang and be assured that I am grateful for the splendid thoughts so ably expressed in the Journal. Tell any of the boys who may come to these parts to look me up.

Ellery C. Gay,
Major, M. C.—O-313177.

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